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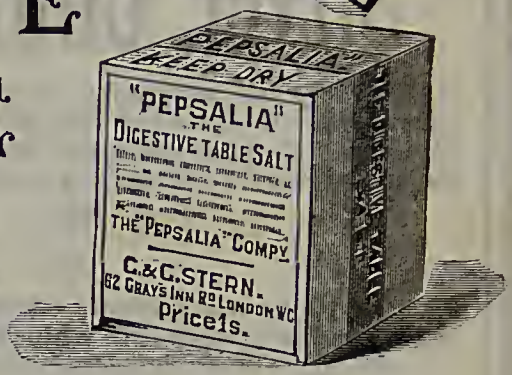

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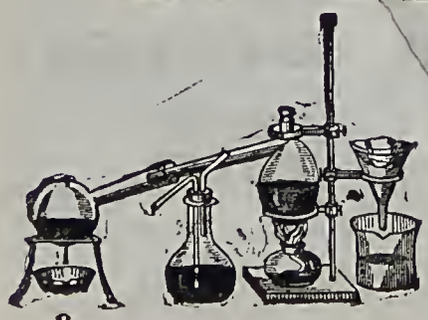

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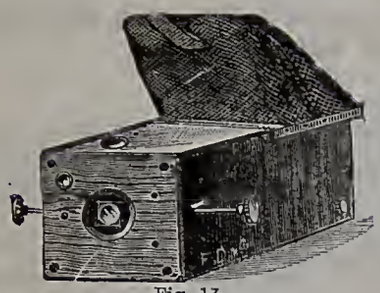

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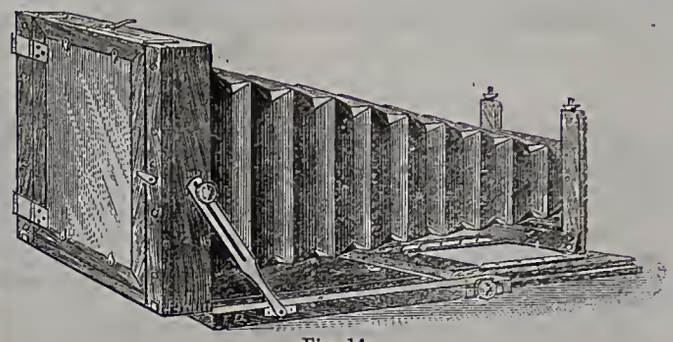

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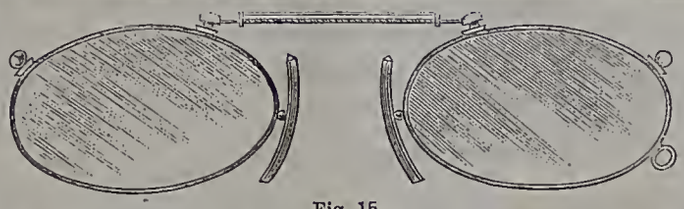

Fig. 15.

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Best black rubber tubing for feeding-bottles, 6*s.* 9*d.* lb.; boxwood unions, 5 gross, 2*s.*; finest satin gutta-percha tissue, 6*s.* 6*d.* lb.; all free; cash with order. Buckley, High Street, Lees, near Manchester.

WANTED.

Good formulæ for English and American writing-inks. Send terms to 71/26.

Formulæ of good toilet specialities. Particulars to W. Lewis, 7 Bishop's Road, London, W.

A 4-foot 4-inch counter-case, as A 56, and soda-water stand, as A 58. Smith, Chemist, Pershore.

A sponge-case and full-size water-bed, both in good condition. Griffith, Pharmacist, Weston-super-Mare.

Saleable patent medicines in exchange for Howard's quinine sulph.; must be clean. 51/8.

A Copy of this Supplement is inserted in every number issued of "The Chemist & Druggist."

The Chemist and Druggist SUPPLEMENT

Businesses Wanted.
Businesses for Disposal.
Premises to Let.
Auction Sales.

SATURDAY, MAY 17, 1890.

Partnerships.
Situations Vacant.
Situations Wanted.
Miscellaneous.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1843, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—**£700.—LONDON, S.W.**—Very good-class Retail and Dispensing Business; nicely fitted shop and good stock; returns about £700 yearly; large house attached; easy terms to an immediate purchaser; worth attention.

2.—**£520.—LONDON, S.E, near the Crystal Palace.**—Good-class Business; returns last year £520, *profits net* £204; well fitted shop and good stock; large house, attractive garden; about £500 required.

3.—**£400.—LONDON, N.W.**—Very handsome shop with good stock; situate in rapidly-improving locality; returns at the rate of £400 yearly under an assistant; less than the value of stock and fixtures will be accepted.

4.—**£800.—LONDON.**—Fashionable locality; first-class Retail and Dispensing Business; returns £800 yearly, *profits very good*; well-fitted shop and large stock; vendor having other engagements will arrange easy terms with a bonâ-fide purchaser.

5.—**£650.—MIDDLESEX.**—Retail and Prescribing Business; returns nearly £650, *good prices*; handsomely-fitted shop, good stock; very large house and garden attached; price £450.

6.—**£1,700.—WITHIN EASY DISTANCE OF TOWN.**—Very old-established Retail and Dispensing, with small Wholesale; returns nearly £1,700 yearly, *with good profits*; large premises; full particulars on application.

7.—**£950—LONDON, N.W.**—Thickly-populated locality; Retail and Dispensing Business of good class; returns last year nearly £950; well-fitted shop and good stock; large house attached; price about £900.

8.—**£2,000.—SUFFOLK.**—Mixed Business; returns last year £2,000; rapidly increasing; large double-fronted well fitted shop and good stock; terms, small premium and valuation.

9.—**£550.—SUSSEX.**—Fashionable watering place.—Light Retail and Dispensing Business of good class; returns £550 yearly; single-fronted shop and good stock; about £480 required.

10.—**£850.—KENT.**—Good business town.—Profitable Dispensing and Retail, with good proprietaries attached; returns £850; *net profits over £400 yearly*; well fitted shop and good stock; price, including valuable proprietaries, £800; worth attention.

11.—**£600.—HOME COUNTY.**—Unopposed country Business situate in attractive locality; business of good class, no heavy trade; returns last year nearly £600; *net profits* £250; well fitted shop, convenient house, large garden; vendor having a large stock, about £600 required.

12.—**£1,100.—SOMERSETSHIRE.**—Good town.—Very old-established Retail and Dispensing Business; held by vendor many years, now retiring through ill health; returns about £1,100 yearly; well fitted shop and good stock; full particulars on application with reference.

13.—**£1,300.—WILTS.**—Good agricultural town; Mixed Business; returns nearly £1,300 yearly; large and commodious premises; good house and garden; about £1,100 required; business will bear the fullest investigation, and worth attention.

14.—**£4,000.**—First-class Provincial Business, Wholesale and Retail for disposal; the investment of about £4,000 is required; references exchanged as a preliminary; particulars on application, personal preferred.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires especial attention of a London agent.

SPECIAL NOTICE.—TO PRINCIPALS AND ASSISTANTS.

MESSRS. ORRIDGE & Co. Register Vacancies for Situations FREE OF CHARGE.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

TO LET.

CHEMIST and Grocer's shop, fitted in excellent style, in Denbigh to Let: central for all parts, and in leading street; town and country; rare opening for man of energy. Apply, W. O. Roberts, The Groves, Chester.

FOR SALE.

TO Chemists Fitting-up or Opening a Branch.—Rare opportunity.—A bargain.—The Fittings of a Chemist's shop, including the following:—16 dozen wide-month and narrow-mouth Shop-rounds, Ointment-jars, 3-lb. Jujube-jars, Double Pill-machine, Show-cases, and Carboys; price £25 the lot. Can be seen any day at 143 Lambeth Walk, S.E.

APPRENTICESHIPS.

WANTED, a youth as Apprentice; one passed Preliminary preferred; small premium required. R. H. Treweeks, Chemist and Stationer, Pembroke.

APPRENTICE.—A well-educated Youth as Apprentice; first-class Retail and Dispensing business; established over 40 years; every opportunity for thoroughly learning the business; comfortable home. Address, G. Atmore, Pharmaceutical Chemist, High Street, Kings Lynn.

APPRENTICE Wanted, in a business one mile from the sea on the South Coast; easy hours; time allowed for study; one who has passed the Preliminary, or an equivalent exam., preferred; premium low. Apply, "Hants," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PARTNERSHIPS.

MANUFACTURING Confectionery Business.—An opening occurs for a Partner in an old and well-known business in the north; first-class references, good mercantile knowledge, and moderate capital necessary. Apply, "Scotia," care of Mr. Jones, Clark, 11 Melbourne Terrace, York.

PARTNERSHIP or Purchase.—Wanted to purchase a genuine business, returning not less than £300 per annum; or would buy a share in an old-established concern, Wholesale preferred; advertiser has capital ready up to £5,000; nothing speculative entertained. Particulars to "Capital," at Horncastle's, Cheapside.

BUSINESSES WANTED.

WANTED, a good-class Retail and Dispensing Business, returning from £1,500 to £2,000 in any large town; Advertiser wishes to purchase immediately, and will pay cash down. Replies to G. D., Chas. Tayler & Co.'s Advertisement Offices, 154 to 157 Fleet Street, E.C.

ADVERTISER is desirous of purchasing a genuine Retail Business, returning £500 to £800; London or country; a larger business would be entertained, sufficient for two friends. Full particulars, in confidence, to E. C. S., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, a good-class Village Business, in dry, pleasant locality; good house and garden essential; Hampshire or Kent preferred; or a bonus of £5 will be paid for information of a suitable opening if proved satisfactory. Fullest particulars, in confidence, to "Phenacetin," Wright, Layman & Umney, Southwark Street, London.

F. J. BRETT,

VALUER, LEICESTER,

60 St. Stephen's Road.

References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS. 20 YEARS' EXPERIENCE.

MIDLANDS.—High-class Retail and Dispensing; returns £700; price £550.

LONDON, W.—Retail, Dispensing and Prescribing; returns £700; price £450.

KENT.—Good-class Retail with own Proprietaries; returns £850; price £750; worth seeing.

YORKS.—Good-class town; Light Retail and Prescribing; under manager returns £600; price £350.

PARTNER required, with £1,000 capital, to develop Business with Mineral Waters, doing £2,000 to £3,000, with plenty of scope for increase.

Mr. Brett has buyers of good-class Businesses, returning £1,000 to £2,000. Vendors can at once be supplied with *cash* buyers.

MESSRS. BERDOE & CO.

CHEMISTS' TRANSFER AGENTS & VALUERS,

30 JEWRY STREET, ALDGATE, E.C.

Established 1870.

VENDORS will find our Offices a quick medium for the Sale of genuine Businesses. Strict confidence guaranteed. Several good-class Businesses wanted returning £700 to £1,500. Town or country.

PURCHASERS are invited to apply (stating their requirements) for particulars of businesses, sent free on application.

NO CHARGE TO PURCHASERS.

GLOUCESTERSHIRE. — Death vacancy: unopposed mixed country trade, Drugs and Stationery; returns £1,650; large house and garden; price £900, or first reasonable offer.

BERKS.—First-class Retail and Dispensing; commanding position; good house, large garden; net profit over £300; price £750.

SUSSEX.—Retail, Dispensing and Prescribing; returns £750; good house; large garden; same hands 27 years; price £650.

NOTTINGHAM (Suburb). — Ready-money Retail and Prescribing; returns £850, solely under management; rent £35; price £600.

HOME COUNTY.—Market town; light Retail and Dispensing; returns £700; net profit £300; good house; price £600.

YORKSHIRE.—Light Retail, Dispensing, and Prescribing; returns £20; good profits; low rent; large house; price £500.

BIRMINGHAM. — Light Retail, Dispensing, and Prescribing; returns £650; rent £30; good house, garden; price valuation.

Dispensary (Near Town).—First-class locality; unopposed Retail and Wine; returns £7 weekly, should do £12; price £225.

LINCOLNSHIRE.—Unopposed Retail and Prescribing; returns £700; net profit £2 OF ENGLAND.—Village business; returns £700; net £350; rent low rent; price £370, less than valuation.

RICHMOND (Near).—Unopposed; same hands 14 years; returns £5 weekly; good house, garden; price £200.

CAMBRIDGESHIRE.—Unopposed Retail; returns £250; rent £30; good house, garden; price £150.

HARROW (Middlesex).—Neglected Retail; returns £5 weekly; £18; 10 roomed house, large garden; price £120.

rent £35; good house, garden; price £100.

Messrs. Berdoe have many other businesses not advertised, particulars of which may be had free of charge; applicants should state class of business required and amount of investment.

Terms for Sale and Valuation on application.

Messrs. Berdoe & Co., 30 Jewry St., Aldgate, London, E.C.

BUSINESSES FOR DISPOSAL.

CHEMIST'S Business, established 1838; the stock, fixtures, and fittings, excellent house, and premises will be sold for £950; or will let on lease (with possession) at £55. Apply to T. W., 150 Victoria Street, S.W.

TO Chemists and Druggists.—For Sale, the Business of the late J. Keith, 28 Kirkgate, Leeds, with the building specially fitted up for doing a good business. For further particulars apply to Keith, 28 Kirkgate, Leeds.

HULL.—For immediate disposal, a good Retail and Prescribing Business in one of the leading thoroughfares, near market and docks; Gilbey's agency; house attached; stock and fixtures at valuation, about £180. Apply, Pickering, Pensegood & Judge, No. 8 Parliament Street, Hull.

NEWCASTLE.—Light Retail and Prescribing Business for disposal, in main thoroughfare; returns £500; net profit fully one-half; rent, house and shop, £40; plenty of scope for increase; proprietor taking larger concern. Address, in the first instance, "Chemicus," 96 Beaumont Street, Newcastle-on-Tyne.

SOUTH or West of England.—Small Business returning £500 to £800 per annum; preferably in a country town with a garden attached. "Beta," Messrs. Hodgkinson, 198 Upper Whitecross Street, London; answers unacknowledged in four days respectfully declined.

Mr. G. B. CROCKER,

Trade Valuer, Transfer Agent, & Accountant,

15 WALBROOK, E.C.

EASTERN COUNTIES.—Old-established Retail and Dispensing trade, now under a manager; returns £550; low rent, large house, long lease; price £380; capital position in good market town.

YORKSHIRE.—Death Vacancy.—Old-established Retail and Prescribing trade; returns £800; price £650; low rent, long lease.

GLOUCESTERSHIRE.—Retail and Dispensing, in centre of busy town; returns £500; price £250; worth attention.

DORSET (Seaside). — Old established Family and Dispensing trade; returns £12 weekly, and increasing; price £500; good house, rent £35.

EAST COAST.—Retail and Dispensing, under neglected management now doing £380; price £250; must increase.

LONDON, S.—Retail and Prescribing trade; returns £800; price £700; large and commanding premises in main road.

LONDON, N.—Retail and Prescribing, very profitable; returns £450; price £350; good house, low rent.

Valuations for Probate or Transfer conducted in any part of the United Kingdom. Terms on application.

BUSINESSES FOR DISPOSAL—Continued.

FOR Sale, a good, sound, and profitable business near Manchester; price £550. Apply by letter to G., care of T. Jones & Co., Broom Street, Withy Grove, Manchester

GOOD Yorkshire town; General, Retail, Prescribing, and Teeth Extracting; returns £40 to £50 monthly; splendid house, and every convenience; old-established; only intending purchasers are asked to apply; every investigation allowed; price £350; cash buyer wanted. Apply, "North Yorkshire," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

RARE Opportunity (genuine business).—Prescribing and general Drugs in a mining and manufacturing town, where a Chemist may make his fortune in a few years; ready-money £500, lowest; to be sold now or any time till June 24. Particulars of W. Z., Bank View, Link Top, Great Malvern, Worcestershire.

OLD-ESTABLISHED BUSINESS.—Age cause of disposal; shop double-fronted, well-fitted and stocked; cash trade; populous locality; valuable proprietary medicines; state amount of cash at command; terms liberal. Address to C. M. K., Miss Atkinson, 40A King William Street, London Bridge, E.C.

£750.—Surrey.—An old-established good-class Family and Dispensing Business, with valuable Agency attached; returns over £1,000; net profit about £400 a year; price to an immediate purchaser, £750; first-class residence and nice garden. Address, "Peccine," care of Messrs. Hearon, Squire & Francis, 38 Southwark Street, S.E.

FOR Sale, an old-established Business of a Wholesale and Retail Drug and Drysaltery, doing a good paying business; death of the late owner reason for sale; a good opportunity for an energetic man; trade might easily be doubled; a rare opportunity for a business man. Apply, J. C., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

£350.—Small genuine Business, near London; Dispensing, Prescribing, and Light Retail; good proprietaries; cash trade; good prices; increasing good stock; well-fitted pharmacy; excellent house, good garden; advantageous lease; business not previously advertised; satisfactory reasons for disposal. "Camphor," Evans, Lescher & Webb, Bartholomew Close, E.C.

WORCESTERSHIRE. — Immediate possession.—Owner, having obtained appointment, will dispose of his old-established Business at a sacrifice; good-class Light Retail, Dispensing, and Prescribing, at full prices; handsome shop, well stocked; returns £700; net profits £250; price £450; nice house, conservatory, garden, &c.; rent £30. "Chemist," Lynch & Co., 192 Aldersgate Street, London.

LANCASHIRE.—Healthy Country District, near Coast.—For early disposal, a Dispensing and Light Retail Business; good and well-fitted shop; large and good house, two gardens; established 3½ years; returns nearly £400, increasing yearly; very good profits; price £360, or small goodwill and valuation; satisfactory reasons for disposal. Address, "Genuine," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

FOR immediate disposal, owing to ill-health of proprietor, a genuine Retail and Prescribing Business, in a rapidly rising seaside town on the east coast; shop handsomely fitted; dentistry combined would largely increase the returns; commodious house; rent easily made by letting in season; goodwill, stock, and fixtures at the low price of £275, being considerably under cost of fittings alone; should be seen at once. Address, G. J. E., at Hornsastle's, London.

LINCOLNSHIRE. — Old-established light Retail and Prescribing Business for sale, with an excellent wine and spirit trade attached; situate in a favourite seaside resort, upon which a large amount has been recently expended in improvements; returns about £1,000, but in good hands the business can be greatly increased; purchaser can have immediate possession, thus getting advantage of present season. Full particulars from Messrs. Colton & Guy, Grimsby.

WANDSWORTH, S.W. (The Plain, 5 miles from Waterloo).—Messrs. Berdoe & Co. are instructed to sell by Tender the Goodwill, Stock, and Fixtures of this old-established light Retail, Dispensing, and Prescribing Business, situated in one of the best positions in the town, opposite the old church. Premises comprise large shop, well fitted and stocked, parlour, kitchen, drawing-room, 5 bedrooms, in thorough repair, garden 150 ft. long, held at low rental; the returns are all cash, and last year were £514 12s., and now doing over £10 weekly; books inspected; offering a rare opportunity to anyone desirous of meeting with a genuine business for about £250. Tenders will be received up to Thursday, 22nd day of May next. Forms and particulars on application to Messrs. Berdoe & Co. 30 Jewry Street, Aldgate, E.C.

BIRMINGHAM.—Profitable light Retail and Prescribing Business in a thickly-populated suburb; returns nearly £400, about two thirds profit; full prices, and no patents stocked: large and convenient dwelling-house, rent £40; price £325. X., care of Wyleys, Coventry.

STAFFORDSHIRE, manufacturing town; returns under bad management nearly £1,000, at good prices, and plenty of scope for increase; large corner, in best position, good house, stable, &c.; only £450 (part can remain if desired) Apply "Smilax," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ESSEX.—Unopposed Light Retail and Prescribing Business; returns nearly £400 by junior; rent and taxes very low; excellent stock; cash price £250; this is genuine, and a business man by adding Mixed trade would find it increase rapidly. For further particulars apply "Chemist," 227 Commercial Road, London, E.

HAMPSHIRE.—A thoroughly genuine old established Dispensing, Prescribing, and Light Retail Business; returns about £700, and shows a net profit of £300; capital position; owner retiring; good opening for a Dentist; no agents need apply. "Musk," Messrs. W. Edwards & Son, 157 Queen Victoria Street, E.C.

LIGHT Retail and Prescribing Business; main road, near London; rapidly increasing neighbourhood; returns about £300; large house, private entrance; to an immediate cash purchaser £200, much below cost or valuation; shop lofty and elegantly fitted; no agents. "Carboy," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

NORTH OF ENGLAND.—Mixed Retail; good and improving position; central manufacturing town, agricultural district, near principal market; double-fronted shop, good house, well-cellared, at low rent; returns about £350; price £250, or stock and fixtures at valuation, less 10 per cent. Also, in same town, Branch Retail (neglected); busy thoroughfare, central, well situated for doing good Prescribing business; returns about £4 per week; rent £30; stock and fixtures £70; offer considered. Write "Cochineal," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED, smart Assistant; Minor; under 30; outdoors. Give references, and enclose carte, to X. Y. Z., 3 University Road, Bootle, Liverpool.

WANTED, immediately, a qualified Assistant. State references, salary required, and full particulars, John Harrison, 33 Bridge Street, Sunderland.

WANTED, immediately, a qualified Assistant; aged 22 or 23; easy hours; state salary and references. W. R. B., care of Mr. Knowles, Chemist, Wallington.

IMMEDIATELY, an Assistant to manage a Branch; state age, salary, references; capable of working up a business; enclose carte (to be returned); not answered in three days, declined. Stevens, Chemist, Dover.

BRANCH, W.C.—Wanted, a good pushing Salesman and Prescriber; exceptional references as to sobriety and honesty. Apply at once, Boutall, 52 Marchmont Street, Russell Square.

JUNIOR, with Minor qualification, in a good Retail and Dispensing business. State age, height, references, and salary required (indoors), to J. Williams, Pharmaceutical Chemist, Aldershot.

FOR Japan.—Qualified English Assistant; about 25; first-class London experience and references indispensable. Apply by letter to Dakin Bros., Creechurch Lane, Leadenhall Street, London, E.C.

WANTED a qualified Assistant, about 24, to take charge of branch establishment; state age, height, and salary required, in or out door. Apply, Breadner, Chemist, Cheetham, Manchester.

JOHN BARKER & CO., Kensington, W., require two smart countermen who have had good experience in a quick Retail business; no Sunday duty; close on Saturdays at 2 o'clock. Apply as above.

WANTED, at once, Junior who has been accustomed to a Mixed country business; quick and willing to make himself generally useful. Apply, W. Bradley, Chemist and Druggist, Wishech, Cambs.

WANTED, a qualified Assistant; must be an accurate dispenser and good address. Apply, stating previous experience, salary required (indoor), and references, to T. & W. & W. Southall, Chemists, Birmingham.

OUTDOOR Assistant, with Minor qualification, for Mixed country business; hours short, and no Sunday duty. Please state age, height, and salary, together with references from last employer, to E. G. Carrington, Chemist, Bakewell.

WANTED immediately, an Assistant; indoors; salary £30; hours 8 A.M. to 10 P.M.; duty every alternate Sunday from 6 P.M. to 9.30 P.M.; half-day per week allowed off. Apply (with photo, if possible), stating age and references, to H., 32 East Street, Barking, Essex.

WANTED, an active young man with experience of shipping business to canvass for shipping orders; Wesleyan and abstainer preferred. Apply, stating age and qualifications and salary required, to "Shield," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ASSISTANT wanted for 10 days, commencing June 2nd (during Bath and West of England show week); one able to take charge preferred, but not essential; time allowed off during daytime if required; state references, experience, and terms. C. F. Wyatt, Chemist, Rochester.

EXPERIENCED Assistant; indoors; three kept; for a first class business; age about 30; must be able to take sole charge in the absence of proprietor. Apply, giving usual particulars and height, to Mr. Brew, 10 Church Street, Malvern. Letters not answered in three days declined.

WANTED, an experienced Assistant at Evans & James', Chemists, Llanelly, South Wales.

WANTED, a qualified Assistant; state salary and references. A. B. Frost, Beeston, Notts.

WANTED, a qualified Assistant, about 23; must be a good dispenser, and have been employed in good-class business. Holden & Kendall, York.

DRUGGISTS' SUNDRIES.—Wanted, a young man. State age, experience, and salary required. Ayrton & Saunders, 149 Duke Street, Liverpool.

DRUG TRADE.—Export Invoice Clerk, who can take a Ledger. Address, stating experience and salary, to C. J., c/o Messrs. Street & Co., 30 Cornhill, E.C.

WHOLESALE; Junior Invoice Clerk wanted; state age, salary required, and experience. Address, "Desk," care of Wertheimer, Lea & Co., Circus Place, London Wall, E.C.

FOR a South-Coast Watering-place.—A competent Assistant; good references; age about 26. For particulars apply personally to Mr. Hick, Queen's Terrace, St. John's Wood.

IMMEDIATELY, in a Mixed country business, a Junior Assistant; one just out of his time; no heavy work; hours of business easy. Apply to Johnson Cripps, Chemist, Reepham, Norfolk.

WANTED, an Assistant, about 22 or 24 years of age, for general Retail and Dispensing business; qualified preferred. Apply, giving references, experience, and salary required, &c., to C. Jackson, 4 Church Road, Acton, W.

WANTED, Junior Assistant, willing to help in Postal duties; abstainer; Wesleyan preferred, but not essential. Apply, stating full particulars, age, height, salary, reference, &c., to Benj. T. Sumner, 10 London Road, Grantham.

WANTED, for Dispensing Department, Haymarket Stores, a qualified Assistant; outdoors; hours 9 to 7. Apply, by letter, stating salary required, &c., "The Chemist," Civil Service Co-operative Society, 28 Haymarket, London, S.W.

WANTED, a qualified outdoor Assistant, not under 30; well up in his business, and accustomed to a good family country trade and the extraction of teeth. Photo, salary required, and all particulars to P. C., Messrs. Wyley & Co., Coventry. An Improver or Turnover also wanted.

ASSISTANT required in London about end of May for about two months; a comfortable home, with plenty of time for study or to attend lectures; help, and use of Minor notes, books, &c., instead of salary. "Calomel," F. Ponting, Herrings & Co., 40 Aldersgate Street, City.

FOR MAY 28th.—Qualified Assistant for Light Retail and Dispensing business; one recently qualified preferred; indoor; good Prescriber; references must bear strict investigation. Apply, enclosing carte, age, height, and usual particulars, to A. E. Breeze, 70 Oxton Road, Birkenhead.

LABORATORY ASSISTANT.—Wanted, immediately for Austra[illegible] a qualified Assistant (Pharm. Chemist preferred) to act as dep[illegible] manager of a Pharmaceutical Laboratory; two years' agreement; pa[illegible] paid. Apply, by letter, to C. U., Wright, Layman & Umney, South[illegible] London.

WANTED, immediately, a Managing Assistant for a [illegible]rs; age business; Minor or other qualification; married; full par[illegible] not exceeding 30; one seeking a permanency preferred. [illegible]ey Street, ticulars, enclosing carte (to be returned), to W. D., 45 [illegible] Liverpool.

AN Assistant (indoors) for good-class Retail and Di[illegible]ing; must be trustworthy, obliging, and with good business[illegible]t Norwood. If preferred. Apply, W. T. Phillips, 193 Knight's Hill, [illegible]ry required, en- by letter, state previous engagements, age, height, [illegible] closing photo.

IMMEDIATELY; Junior Assistant, aged [illegible] 21; well up in Dispensing and good class Retail, able to Pres[illegible] Apply, stating age, occasionally during temporary absence of princi[illegible]signed, with photo, to height, salary, reference (last employer), when [illegible] John Len, Folkestone.

INDOOR Assistant at once for a good [illegible]trv business; must be a careful dispenser, steady, active, and ob[illegible]g, and able to take charge during principal's absence; hours 8.30 a.m. [illegible] p.m., Saturdays 10.30 p.m.; no Sunday duty. State age, height, and [illegible]y required to Garrett Bros., Chemists, Newport, Mon.

TO Druggists' Travellers.—The Rizi[illegible] Company are open to negotiate with gentlemen at present calli[illegible]pon Chemists and Druggists in London and suburbs to introduce [illegible]ine to the trade; liberal terms. Apply, by letter in first instance, to [illegible]nager, Rizine Company, 87 Borough High Street, London, S.E.

QUALIFIED Assistant (out[illegible]or), from 21 to 24 years of age, for small country branch bu[illegible]ess; must be energetic, pushing, and accustomed to good-class Retail [illegible]d Dispensing trade; duties light. State salary expected, and when di[illegible]gaged, also height, age, and send photo, Samuel Lawrence, Chemist, C[illegible]n.

TRAVELLER.—Wanted by a "Speciality House," a thoroughly competent and experienced man for town and country; one with connection among Medic[illegible] Men, Chemists, &c., preferred; salary and commission. Address, st[illegible]ing age, salary required, &c., L. G. & C., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TRAVELLERS wanted for disinfectants, carbolic acid, sheep dip, &c., one for each of the following grounds:—(1) Eastern Counties, Oxford, and Northamptonshire; (2) Wales; (3) East Coast and Newcastle district; (4) Lancaster, Cumberland, and Westmoreland; gentlemen with suitable connections covering any of the above districts for another house would be offered a liberal commission. "Disinfectants," Chas. Tayler & Co.'s Advertisement Offices, 154 to 157 Fleet Street, E.C.

AN indoor Assistant (with Minor qualification), about 23 or 24 years of age; must be a reliable dispenser, accustomed to good class of trade, and of good address. Apply, with references, age, height, experience, and salary required, to John Hallaway, Pharmacist, Carlisle. Also a Junior or Improver.

WANTED, Minor Assistant; 25 to 30; outdoor; no other kept; no Sunday duty: hours 8 to 9, Friday 9.30, Saturday 10.45 p.m.; country business, mixed, oils, paints, seeds, &c.; state salary required, give references, address of last employer, with reason for leaving; a suitable person will find this a permanency. Address, J. Morton, Ramsbottom.

REQUIRED for the Transvaal, a fully qualified Chemist's Assistant; must have first-class West-end experience; strong and healthy; age not to exceed 30; salary given, £18 per month first year, £20 per month second year, and £22 per month third year; three years' agreement; second-class passage paid out. Address, with full particulars, to D. R. C., Messrs. Street, 30 Cornhill.

IMMEDIATELY, a smart Junior or Turnover of good address, for Retail, Dispensing, and Photographic business, or Branch; industrious, obliging, and trustworthy; Tooth Extractor and good Salesman preferred. State age, height, experience, outdoor salary, and enclosing photo and references, to "Pharmacy," 67 Freeman Street, Grimsby. Personal applications preferred. Also outdoor Apprentice wanted.

TOWN Traveller wanted to represent a leading Wholesale Druggists' Sundries and Patent Medicine house; must be well acquainted with the trade, and have a connection amongst Chemists in the West and South districts of London and suburbs. Apply, by letter, stating age previous experience, and full particulars as to commission required, to "Alpha," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

DENTISTRY.—Wanted, a Pupil, by an L.D.S., holding a Dental Hospital and an Asylum Appointment in Manchester, and within five minutes' walk of Hospital and Dental School. Address, 15 Stretford Road, Manchester.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

PART Time; June 1; aged 25. "Gresham," 41 Nightingale Lane, Balham, S.W.

MANAGER or Assistant; aged 40; Major qualification. D., 7 Broomhall Street, Sheffield.

JUNIOR (21); first class Dispensing experience and references; easy hours. Challis, Carlisle.

JUNIOR (20): 5 years' experience; outdoors preferred. Johnston, 33 Howe Street, Carlisle.

ASSISTANT; 6 years' experience; good references. H. E., Chemist, 24 Waterworks Street, Hull.

LOCUM-TENENS; Minor; aged 28; satisfactory references. Right, Glenbræ House, Dumfries.

A[illegible]tant: tall; London experience; good reference; aged 24. [illegible]n, Clydach, Swansea.

ASSIS[illegible]T, Manager, Locum-tenens; qualified. "Chemicus," [illegible] Square, Kennington.

WHOLE[illegible] 55 Bo[illegible]E; as Assistant; dry counter; aged 25. W. E., [illegible]eet, Vauxhall, S.W.

AS Junior in [illegible]ence. D., [illegible]d-class Dispensing business; 5 years' good experi- [illegible]dney Street, S.W.

ASSISTANT ([illegible] Beaumont, Bo[illegible] 7 years' experience; good Dispenser. Plummer, [illegible] Street, Bedford.

ASSISTANT or S[illegible] preferred. W., 2[illegible]ou's Dispenser: experienced; 25; time for study [illegible]ird Avenue, W.

LOCUM-TENENS [illegible] Chemist, exam. Be[illegible] Manager by experienced Pharmaceutical [illegible]nin Heald, Sleaford.

IMMEDIATELY; outd[illegible] petent, qualified. Lea, 1[illegible] or temporary: London or suburbs; com- [illegible] Holloway Road, N.

IMMEDIATELY (outdoo[illegible] preferred. "Assistant," 10[illegible] Store or Wholesale; aged 29; town [illegible]de Street, Barnsbury, N.

WAREHOUSEMAN; Pat[illegible] Medicine, Proprietary, Sundries; 7 years' experience. H., 34 [illegible]mpton Street, Walworth.

DISPENSER to Surgeon, or as J[illegible]or, with time for study; abstainer; aged 23; 9 years' experience. [illegible]pman, Wragby, Lincolnshire.

ASSISTANT or Branch Manager; [illegible]nor; aged 32; good Prescriber and Dispenser; married. "Chem[illegible]" care of Mr. T. Mann, Newington, Hull.

MANAGER, Senior, or Locum-Tenens [illegible] married; aged 28; highest references. "Extractor," Gladstone [illegible]rrace, Church End, South Woodford.

WHOLESALE.—An experienced man re[illegible]res situation in Wet or Dry Department; highest references. W. B., Darley Street, Leicester.

LONDON.—Assistant, qualified, desires engag[illegible]ent, with evening or two off weekly, to attend class for Major. "[illegible]hemist," 16 Merrion Street, Leeds.

TRAVELLER.—Wanted, situation as above, to [illegible] upon Surgeons and Chemists; well up in drugs and surgical [illegible]struments. M., 15 John Street, Bristol.

MANAGER of Branch or otherwise; town or country; experienced; qualified and registered; satisfactory references. "Max," Llanbadarn House, Sunbury.

LIVERPOOL preferred.—Wanted, situation as Junior; 19½; 5 years' experience; disengaged June 2. "Junior," Palmer, Chemist, Cleethorpes Road, Grimsby.

JUNIOR; 3 years' experience; passed Preliminary, also Arts Exam., Apothecaries' Society; object—more dispensing practice. C. E. R., 66 Week Street, Maidstone.

FRENCH Assistant, aged 24, good experience and excellent references, desires situation; understands a little English. J. Catteiain, 53 Charlotte Street, Fitzroy Square, London.

A GENTLEMAN, just out of business, having time at his disposal, would be glad to assist Chemists or act as Manager. Terms, &c. apply A. B., 24B Hereford Road, Bayswater.

WANTED by a Registered Chemist, well up in Prescribing and Teeth Extracting, to take charge of business in absence of principal. R. W. A., 13 Victoria Crescent, Dover.

MANAGER of Branch, or outdoor; Senior, thoroughly experienced; qualified by examination; London or suburbs preferred; good references. "Zymine," Mr. Sunley, 237 Goswell Road.

ADVERTISER, aged 30, first-class London and provincial experience, lately partner in considerable establishment, wishes temporary occupation pending other arrangements. Shaw, Poste Restante, Birmingham.

TRAVELLER.—A gentleman, with long experience on the road, well known to Chemists, &c., in Eastern and Midland counties, is open to represent a good firm. Address, Fides, care of Smith & Sons, Wholesale Druggists, Norwich.

A YOUNG man, aged 21, 5 years' experience in good Dispensing business, wishes to meet with a situation, part time, with opportunity for study for exam.; unexceptionable references; London preferred. T. Ll. J., Compton House, Mold.

SOLUBLE Essences of every description, for mineral-water makers, confectioners, &c.; advertiser, Chemist, &c., requires engagement to manufacture; will guarantee to produce finer and stronger essences than any yet placed upon the market; would prefer salary and pecuniary interest in business. "Ginger," Office of THE CHEMIST AND DRUGGIST 42 Cannon Street, E.C.

MISCELLANEOUS.

CHEMISTS' AERATED WATERS ASSOCIATION.—A few £10 shares for disposal; increasing business; good dividends; this is an opportunity rarely occurring. Apply to W., care of the Secretary, 45 Gifford Street, Caledonian Road, N.

ALFRED HOLT & CO., Oil, Drug, and Chemical Brokers, 19 Oldhall Street, Liverpool, offer the finest new season's non-freezing Cod-liver oil that can be obtained at any price, at 2s. 9d. per gallon in 25-gallon barrels; can be sent direct from Norway, carriage paid, if desired. Extra super Messina Essence of Lemon, 4s. 3d. per lb.

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ALL Students who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hills Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. Student's Herbarium, 100 specimens, 7s. 6d., post free.

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Organic Materia Medica. Concisely tabulated, thus saving much time and laborious reading. Post free, 1s. 1d.; cloth gilt, 1s. 7d.
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First Quality, 9d. per lb., by using
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In Jars (free), ½ lb. 2s. 3d.: 1 lb. 4s. 3d. net.
Making 3 lbs. and 6 lbs., costing ½d. per oz., by simply adding Water and Glycerine.
Thro' any Wholesale House, or post free for P.O.
PHARMACEUTICAL CHEMISTS,
ROUSE & CO., 12 WIGMORE ST., LONDON, W

Printed by SPOTTISWOODE & Co., New-street Square; and Published at the Office, 42 Cannon Street, in the City of London.—*May* 17, 1890.

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GREAT REDUCTION IN PRICE.

We have recently been entrusted with a most important Agency for the above-named goods. Our Principals are the best known firm in Paris, and the Syphons are undoubtedly the cheapest and strongest in the market. The tops are made of pure English Tin, guaranteed free from lead. The Seltzogenes are made on the well-known "Fevre" system, and each one is thoroughly tested before being sent out.

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We have obtained at the above Exhibition

3 HIGHEST AWARDS POSSIBLE

A feat never accomplished before by any other house supplying requirements for the Aërated Water Trade.

These awards will carry with them THREE GOLD MEDALS, which were awarded as follows:—

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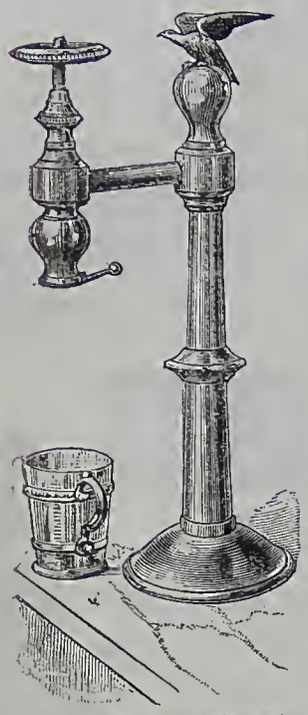
BARNETT & FOSTER,

"Niagara Works," 26T EAGLE WHARF ROAD, LONDON, N.,

Manufacturers of every Appliance for the

MINERAL WATER TRADE.



(The cylinder containing water, and the vessel containing the gas, are placed under the counter, and connected by piping to the Fountain on the Counter.)

LIQUEFIED (SO-CALLED NATURAL) CARBONIC ACID GAS

FOR USE WITH

COUNTER FOUNTAINS or SODA WATER MACHINES,

FOR FILLING BOTTLES & SYPHONS.

With the **COUNTER FOUNTAIN** as shown, we draw direct into the Glass Tumbler, thus avoiding the loss of time occupied in first filling a bottle, and then emptying into the Tumbler, and also the loss of gas in the double operation.

The Gas is supplied in a steel vessel, at a cost of 10*s*., and a charge is made for the vessel, which is allowed for in full on return.

There is sufficient Carbonic Acid Gas for supplying 3,000 draughts of Soda Water.

SPECIAL MACHINERY AND BOTTLING APPLIANCES

For the manufacture of Mineral Waters as a Business (using the Liquefied Gas) are manufactured by us.

All information, with Catalogue, can be had upon application to above.

The System is on view, and all information given, at the

ROYAL MILITARY EXHIBITION, CHELSEA.

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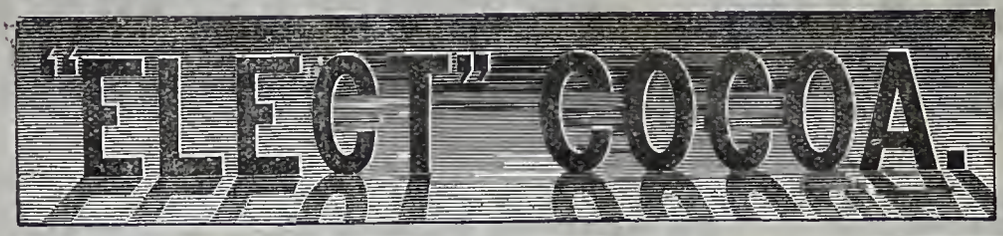

The "MEDICAL PRESS AND CIRCULAR":—

"Certainly this preparation is of **delicate flavour** . . . It is perfectly soluble . . the **small quantity required** for the *immediate* production of a cup of excellent cocoa will ensure for this '**Elect Extract**' a favourable reception at the hands of persons of weak digestion, and all who prefer this wholesome beverage to tea and coffee.

The "BRITISH MEDICAL JOURNAL" says:—

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LIEBIG'S BEEF WINE.

Composed of Liebig's Extract of Beef, Extract of Malt, and sound Port Wine.

REPORT ON BEEF WINES.

From the results of my Analyses of various **Beef Wines** I have had occasion to examine, none have **equalled** as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. Robinson, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to **Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.**

WILLIAM ELBORNE, F.C.S., F.L.S.,
Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).

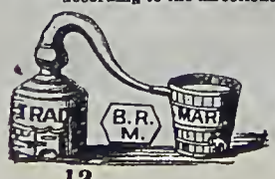
December 15, 1888.

Introduced 1855.] ROBINSON'S CONCENTRATED WATERS. [Introduced 1855.

One Ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), similar in every respect to those prepare according to the directions of the British Pharmacopœia, and free from all Chemical impurity. They will keep good any length of time in any climate.

Aqua Anethi, Concent., 4/ lb.	Aqua Cinnam. Ver. Concent., 6/ lb.	Aqua Fœniculi, Concent., 4/ lb.	Aqua Pimentæ, Concent., 4/ lb
" Anisi " 4/ "	" Cassiæ " 4/ "	" Month. Pip. " 4/ "	" Rosæ " 8/6 "
" Camphoræ " 4/ "	" Flor. Aurant. " 8/6 "	" " Ang. " 6/ "	" Rosæ Virgin " 10/6 "
" Carui " 4/ "	" Flor. Sambuci " 8/6 "	" " Virid. " 4/ "	

The above are put up in Bottles of ½ lb. or 1 lb. and upwards, each of which has the Inventor's Protection Label over Cork.



From the LANCET, *July* 15, 1882:—"CONCENTRATED WATERS (Robinson's, Pendleton, Manchester).—Among the samples sent to us we find Aq. Anethi, Anisi, Cinnam. Ver., Rosæ, and some dozen of others. Diluted with forty parts of water they form the ordinary waters of the Pharmacopœia. They are *excellent in quality*, and will be very useful, especially in country practice. [1]

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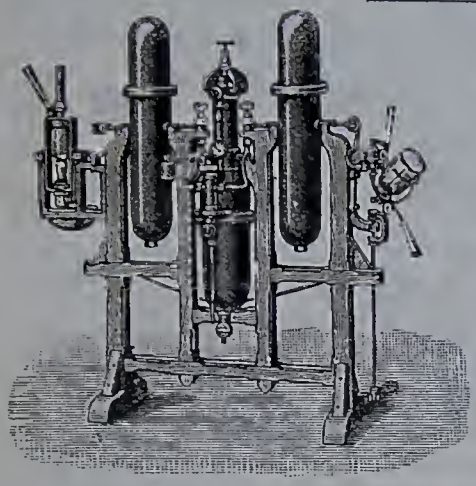

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THE ONLY PRACTICAL SODA WATER MACHINE.

Self-working by Chemical Action. No Skilled Labour.

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Produces the Purest Aërated Water made.

Machines, in two sizes, at 25 guineas and 30 guineas. All complete. With the smaller a lad can make easily in ten hours twenty dozen Syphons or 100 dozen Bottles; with the larger, thirty dozen Syphons or 175 dozen bottles.

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I have examined during the present year the Machines for making Aërated Waters invented by Mr. Lozé, and I have formed a very high opinion of them. No lead is found in any part which comes in contact with the water, and the process is one which produces absolutely pure Carbonic Gas. Accordingly I find that the effervescing water produced is free from every injurious metal or contamination, and has a better flavour than that produced in the ordinary way. J. CAMPBELL BROWN, D.Sc.

CHEMICAL LABORATORY, 20 ALBERT GATE, MANCHESTER, 21st August, 1889.

GENTLEMEN,—At your request I have visited the works of Messrs. A. Lozé & Co., of Prescot Street and Tuebrook, Liverpool. I have inspected his patented Apparatus for producing Aërated Waters, and have analysed the Aërated drinks manufactured. The results of analysis quite justified the inferences which were drawn from a knowledge of the materials used. Thus, instead of using ordinary whiting (as the source of carbonic acid gas), which gives off small quantities of offensive gases when acted upon with acid, Mr. Lozé uses one of the pure soluble bicarbonates of either Potash or Soda; the use of this salt enables the apparatus to be much simplified in form, as no gas washer is required, but the carbonic acid gas may be led at once into the liquid in the Saturating Cylinders. The Aërated drinks produced are of very high quality, both as to purity and as to Aëration, and the apparatus possesses the merit of extreme simplicity and efficiency.—Faithfully yours, C. ESTCOURT, F.I.C., F.I.

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Dear Mr. Lozé,—I am pleased to inform you that I have been able to work the Machine sold to me by you without previous knowledge. With your patent Turnover I can bottle Patent Stoppers at the rate of two dozen per minute. Syphons and Corked Bottles I can fill much quicker than what you advertise the Machine to do.

The Aërated Waters produced have been sampled by a number of gentlemen, and pronounced by them to be of a most excellent quality.—Wishing you every success, I remain, yours truly, ROBT. J. GOW, F.C.S.

RASPBERRY CITRATE OF MAGNESIA

(THE ORIGINAL).

THE CITRATE OF THE SEASON.

This preparation contains the well known properties of Citrate of Magnesia, with the flavour of the Natural Fruit; in ½-lb. Bottles **8/-**, 1-lb. **14/6** per dozen; in 7-lb. Tins at **90/** per cwt. Chemists and dealers should order at once, as the season is now advancing. If ordered in 7-lb. Tins, labels supplied free.

The *Chemist and Druggist* of 5th April, 1890, says:—"Mr. Henry Quelch is introducing a distinct novelty for summer trade, viz, a granular effervescent raspberry citrate. This has a good raspberry flavour and a pink colour, and forms, with the usual quantity of water, a refreshing draught. It should be a popular article this year, and is worth the attention of Chemists and Druggists."

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In ½-lb. and 1-lb. Jars, **2/3** and **4/3**. Makes 3 lbs. and 6 lbs. of Emulsion respectively.

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ARE GUARANTEED TO BE THE FINEST IN THE MARKET

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HOP ALE AND GINGER ALE ESSENCES.

Besides GOLD & SILVER Medals, these Essences have obtained the HIGHEST TESTIMONIALS from all the Medical Journals & from the Principal Trade Journals in this & other Countries.

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FOR THE EFFECTIVE TREATMENT OF

Disorders of the Organs of Respiration and Digestion,
Catarrh of Larynx and Stomach, the Enlargement of Liver and Spleen,
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TO BE OBTAINED THROUGH ALL WHOLESALE HOUSES.

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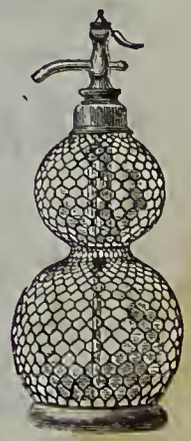
MACHINISTS, PATENTEES,

PARIS—72 BOULEVARD DE LA GARE, 72—PARIS.



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GAZOSELTZ, for the instantaneous production of Aërated Beverages at table. Anyone can use them.

"CONTINUOUS PROCESS" Apparatus complete, guaranteed without flaw in construction, possessing perfect action, and tested to a high pressure, while fulfilling every desirable condition of economy and sanitation.

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GOODALL'S HOUSEHOLD SPECIALITIES.

YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each.

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The Best in the World. 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

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One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s. 2s. and 5s. Tins.

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Delicious Custards without Eggs. In Boxes, 2d. 6d., and 1s. each.

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Delicious Blancmange in a Few Minutes. Boxes, 6d. and 1s. each.

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Best Tonic yet Introduced. Bottles, 6d., 1s. and 2s. each.

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Makes the Best Ginger-Beer. Packets, 3d. nd 6d.

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For Painting Stoves, Grates, Iron, Tin, &c. 6d. and 1s. Bottles.

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A Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

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For Polishing and Cleaning all Metals. Boxes, 6d., 1s. and 2s

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Make a Delicious and Nutritious Jelly. In ½-pint, 1-pint, and Quart boxes, 3d., 6d., and 1s. each.

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PATENT MEDICINES AND DRUGGISTS' SUNDRIES.

Monthly Price List of Patent Medicines, Druggists' Sundries, &c., will be sent post free on application to

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AGRICULTURAL CHEMISTS SHOULD STOCK

MADE ON THE DANISH SYSTEM. A PURE VEGETABLE PREPARATION. DOES NOT DISCOLOUR THE BUTTERMILK.

Attractive Bills.

Bottles, 6d, 1s., and 2s. 6d.

STOCKED BY WHOLESALE HOUSES.

ALSO

TOMLINSON & CO.'S BUTTER POWDER.

IN USE 35 YEARS.

To be used at time of Churning. Corrects all Bad Taste. Keeps Butter Sweet and Firm.

Boxes, 3d., 6d., 1s., 2s. 6d., and 7s.

OF ALL WHOLESALE HOUSES

ATTRACTIVE SHOW BILL &C.

Manufactory - - LINCOLN.

A NEW ARTICLE FOR CHEMISTS AND DRUGGISTS.

RIZINE! RIZINE! RIZINE!

A HIGHLY NUTRITIOUS FOOD FOR CHILDREN AND INVALIDS.

Unsolicited Testimonials from Medical Men in all parts of the Kingdom. All are unanimous in pronouncing "Rizine" to be

THE MOST NUTRITIOUS FARINACEOUS FOOD EXTANT.

Signor SUCCI at the end of his wonderful Forty Days' Fast took "Rizine" as his first solid food, and has taken it daily ever since.

Dr. ROBINS, M.R.C.S.Eng., L.R.C.P.Edin., Succi's Medical Attendant, says:—

"'RIZINE' could hardly have been subjected to a better or more delicate test as to its digestibility than this, and when we consider the fact that Signor Succi increased in weight 21 lbs. 12 oz. in the first ten days on a diet of which 'Rizine' was the only farinaceous element it may be taken as a proof of its nutritious value."

Samples, Price Lists, and Recipe Books free on application.

Offices—41 GRACECHURCH STREET, E.C. Works—87 BOROUGH HIGH STREET, S.E.

IN YOUR REPLY PLEASE MENTION THIS PAPER.

BRAGG'S VEGETABLE CHARCOAL.

Sold in Powder, 2/-, 4/-, and 6/- bottles; also in Biscuits, 1/-, 2/, and 4/- tins (Children like these), and in Lozenges, 1/1½ tins (portable and convenient).

Undoubtedly the most natural preventative and curative agent in all cases of Indigestion, Disorders of the Liver, Fevers, Cholera, Dysentery, &c.

The trade cannot do better than keep these old-established and safe preparations under the notice of their customers.

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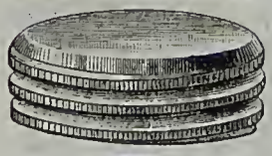

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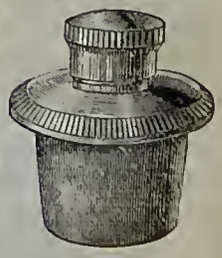

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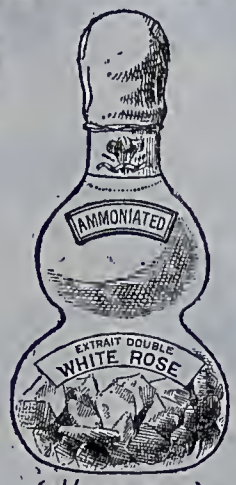

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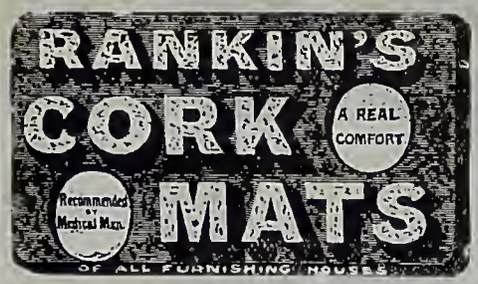

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Parcel 6, 40/. 5 doz. 6*d.*, 3 doz. 4*d.*, 2½ doz. 1*s.*
Parcel 7, 40/. 4 doz. 6*d.*, 4 doz. 4*d.*, 1 doz. 9*d.*, 2 doz. 1*s.*
Parcel 8, 40/. 4 doz. 1*s.*, 2 doz. 9*d.*, ½ doz. 1*s.* 6*d.*

No. 17F.—Very flat, Boxwood shape, suitable for pocket..... 5/- doz

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Nos. 188-9.

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Nos. 168-9.

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Well Cut and Stoppered, empty 3/6 doz., 39/- gross.

Filled with "Ever-Fresh" Salts,

4/- doz., 45/- gross.

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☞ Over 200 Patterns of Cut-glass and China Bottles to choose from. Before buying, please order a sample dozen assorted, or send for List, or call and inspect samples, and then compare prices with any house in the Trade. ☜

ARTHUR W. SHIRLEY, 55 FARRINGDON ROAD, LONDON, E.C.

A PROBLEM.

LONDON.] MAY 17. [1890.

WHAT is it that constitutes an Extract of Malt which is scientifically perfect in every respect? This question introduces an interesting problem teeming with highly practical suggestions.

The following seems to designate what is absolutely essential to a superior Extract of Malt:—

(1). It should be prepared from the very best winter barley, and contain all the nutritive principles of the grain. This is imperative.

(2). It should be evaporated *in vacuo*, and not in an open pan. This is indispensable; otherwise instead of being pleasant the malt will possess a burnt or tarry taste and smell.

(3). No substitution should be allowed—as of other cereals for a part of the barley, or glucose for a part of the maltose.

(4). There must be absolute purity and an absence of all adulterants.

(5). It should be rich in diastase—the digestive ferment which converts starch into sugar.

(6). It should be of substantial consistence or it will be liable to decompose.

(7). If the heat in the process of manufacturing be raised too high, the diastase will be destroyed.

(8). No fermentation whatever should be allowed to take place, otherwise the maltose will be partially converted into alcohol, and carbonic acid and a species of beer formed.

It is thus seen that the superiority of a malt extract does not rest with one thing alone, but with many, such as the taste, nutritious properties, assimilability, perfect purity, diastase, &c.

Any extract of malt which possesses a treacly or mawkish taste, contravenes to that degree the excellence of the preparation. All malt extracts, in which alcohol has been formed are of little value, and should be discarded.

Admittedly the peculiar nature and composition of barley specially fit it for the manufacture of malt extract. Its worth has been recognised from time immemorial, and if there were anything which would yield a better malt extract than barley, it would soon be known, and the use of this grain abandoned. But there is nothing better, nor anything half so good. And whenever any other cereal is substituted for the barley, to that extent is the malt extract made of something ostensibly inferior to barley for the purpose.

There is a story of a little news-boy who called at the surgery of a physician "lean and long." The doctor was out, but his better half was at home, and in seeking for a penny to pay for a paper she opened the door of a closet, disclosing thereby a skeleton. The boy no sooner caught a glimpse of the skeleton than he scampered out of the surgery, frightened through and through. The next day the physician wanted a paper, and descrying by chance the selfsame boy, beckoned to him. "*No, you don't,*" exclaimed the lad, shaking his head; "*I know yer, if you have got yer clothes on!*"

Similarly the claims for a substitution mixture (wheat and oats) are so lifeless from a logical standpoint that the keen and wide-awake would at once place them among the senseless and useless—in fact, the dried bones.

The Kepler Extract of Malt is made from pure barley only, and enjoys the soundest approval of the medical profession throughout the world.

The *Lancet* says:—"It is the best known and largest used."

The *London Medical Record* says:—"We have tested it, and it is undoubtedly the best."

The *Medical Press and Circular* says:—"It is the most palatable and easily digested."

The Kepler Extract of Malt and the Kepler Extract of Malt with Cod Liver Oil (Kepler Solution) supplied to the Trade in bottles, containing ¾ lb and 1½ lb., at 22*s.* and 38*s.* per dozen. Retail prices, 2*s.* 6*d.* and 4*s.*

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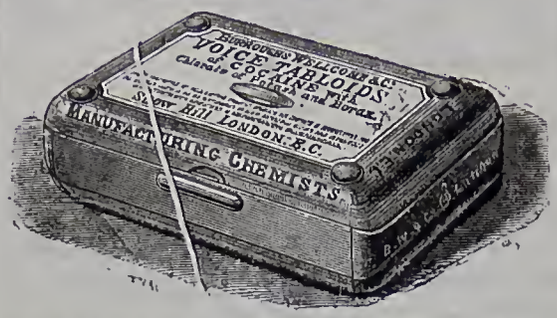

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Impart a clear and silvery tone to the voice. Easily retained in the mouth while singing or speaking. Now used by the leading singers and public speakers throughout the world.

DIRECTIONS.—A single Tabloid may be slowly dissolved in the mouth to remove huskiness or hoarseness.

Supplied to the Trade in beautifully graven white metal boxes, blue silk label, at 8*s.* and 16*s.* per dozen. Retail prices, 1*s.* and 2*s.* per box. In oval bottles (vinaigrette style), at 8*s.* 6*d.* per dozen. Retail price, 1*s.*

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See Recommendatory Notice of Medical Press and Opinions of the leading Dermatologists.

WRIGHT'S LIQUOR CARBONIS DETERGENS.

Extract from the Proceedings of the Royal Society of Edinburgh :—"Experiments on the Chief Disinfectants of Commerce, with a view of ascertaining their power of destroying the spores of the 'Anthrax Bacillus,' by a Medical Officer of Health and Public Analyst. A 10 per cent. solution of Liquor Carbonis Detergens, acting for four hours, distinctly retarded growth of Anthrax, for the spores, whether in gelatin-pork or in the broth, did not commence developing for 24 hours. Undiluted Liquor 'Carboni Detergens,' acting for four hours, arrested future growth."

Of all Druggists, Wholesale and Retail, throughout Great Britain, Ireland, and Colonies.

The *Practitioner* of September, 1881 :—"**Eczema** connected with varicose veins of the leg—also Pruritus Scroti, Labiorum, and Ani—is best relieved by weak tarry lotions, one of the best of which is *Wright's Liquor Carbonis Detergens.*"

P. McLEOD, Colonel R.A., Inspector-General of Ordnance, Ordnance Office Madras, writes Sept. 10, 1887 :—"I can certify that 'Liquor Carbonis Detergens, has cured me of a PSORIASIS of 21 years, incurred in Burmah, after every effort of such an able skin doctor as Sir Erasmus Wilson had failed."

From the *Lancet*, Dec. 22, 1886 :—"In our hands it has been a most effective agent in skin diseases, especially of the chronic eczematous class, and one class of psoriasis which had resisted all other kinds of treatment speedily get well under the application of the *Liquor Carbonis Detergens.* We esteem it a very valuable addition to our list of skin remedies."

From the *Medical Times and Gazette* Jan. 19, 1867 :—"We have more than once called attention to the value of this remedy in **chronic eczema.**"

From the *British Medical Journal*, Sept. 22 1871 :—"We have tested it, and can affirm its value as a detergent agent. We consider the Liquor is an article of great utility."

Kept in stock and sold by all Druggists (Wholesale and Retail) throughout the United Kingdom and Colonies. PROPRIETORS—

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THE CHEMIST AND DRUGGIST

ESTABLISHED 1859.

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICES:

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Post free to every country in the world. Single copies 4*d.* each.

Cheques or Postal Orders should be payable to EDWARD HALSE, and crossed MARTIN & CO.

Supplied regularly to every member of the following Societies, who have adopted THE CHEMIST AND DRUGGIST as their official organ:—

The Pharmaceutical Association of New Zealand.

The Pharmaceutical Society of Queensland.

The Pharmaceutical Society of South Australia.

The Hobart Chemists' Association.

The Launceston Pharmaceutical Association.

South African Pharmaceutical Association.

For Australasian subscribers the subsidiary journal, THE CHEMIST AND DRUGGIST OF AUSTRALASIA, is included.

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PUBLISHER'S NOTICE.—Copies of next week's issue will be sent to all the principal drug firms and pharmacists throughout the United States and Canada; as the same issue will contain full and special reports of the pharmaceutical meetings of next week, it will also have a particular interest for the trade at home. We strongly recommend advertisers to take advantage of this important occasion. Application for space must be made not later than Wednesday.

IMPORTED MINERAL WATERS.—In the House of Commons, on Thursday, Sir Michael Hicks-Beach stated, in reply to Mr. Watt, that he could not estimate the amount of mineral waters imported into the United Kingdom during the last financial year. There is no duty on these waters.

A UNIVERSAL PENNY POST would, said Mr. Raikes, in the House of Commons on Thursday, entail an annual loss of 400,000*l.* to this country, supposing there was no increase in the number of letters.

WINE LICENCES were, amongst others, hit at by Mr. Summers on Thursday, when he asked Mr. Goschen if he would not make a considerable increase in the duty on Excise licences. Mr. Goschen sees no reason for doing so.

POSTCARD COMPETITION.

MAY.

SUBSCRIBERS and their employés are invited to contest the judgment of Mr. Justice Hawkins, which we published in THE CHEMIST AND DRUGGIST for May 3, in the case of the Pharmaceutical Society *v.* Wheeldon. We regard that judgment as a model of reasoning, and we believe it to be almost unanswerable. But every case has two sides, and a great many chemists do not take the same view as we do of the question involved. Whatever their views may be, however, the close examination of Mr. Justice Hawkins' judgment with a view of finding flaws in it should be a wholesome exercise, and we offer the usual prize of one guinea for the best reply to it which we may receive ON A POSTCARD before May 31 from any subscriber or employé of a subscriber.

The subject may—and, indeed, must—be dealt with very concisely, the arguments being rather outlined than elaborated. We may also remark that it is by no means essential that competitors should in their own minds disagree with the judgment which we ask them to attack.

THE PHARMACEUTICAL MEETINGS next week are as follow:—A *conversazione* will be held in the Society's house, 17 Bloomsbury Square, on Tuesday evening, commencing at 8.30 P.M.: ladies are invited. The annual meeting of the Society will be held at 17 Bloomsbury Square, on Wednesday, commencing at noon precisely. Annual dinner of the members and friends of the Society will take place at Freemasons' Tavern on Wednesday evening at 6.30 for 7 P.M. Lastly, the declaration of the result of the poll will be made at an adjourned meeting, which will probably be held on Thursday afternoon.

WE have pleasure in announcing to Continental subscribers that henceforth, by arrangement with the post offices of the various countries, subscriptions to THE CHEMIST AND DRUGGIST can be paid at any post office in Austria-Hungary, Belgium, Denmark, Germany, Holland, Norway, Russia, and Sweden at our rates, namely 10*s.* per annum including postal delivery to subscribers in any of those countries. Subscriptions may date from the first issue of any month.

THE CHEMIST AND DRUGGIST OF AUSTRALASIA, published monthly at our Melbourne office, can be supplied to subscribers outside Australasia at 5*s.* per annum, payable in advance, and commencing at any date. Chemists interested in the drug trade and the pharmaceutical affairs of the Australasian Colonies will find a full record of all events affecting their occupation in *The Chemist and Druggist of Australasia.* Single copies can be supplied at 6*d.* each. Application should be made by English or American subscribers to the office at 42 Cannon Street, London.

THE subscription to THE CHEMIST AND DRUGGIST is 10*s.*, which includes the numbers for a whole year, a copy of THE CHEMISTS' AND DRUGGISTS' DIARY next published, and postage to any part of the world. Orders and cheques should be made payable to Edward Halse.

THOSE who put up medicinal specialities will find Alpe's "Handy-Book of Medicine Stamp Duty" to be a lucid interpretation of the Acts bearing upon the stamping of medicines. Published at this office, price 2*s.* 6*d.*, by post 2*s.* 9*d.*, and may also be obtained from wholesale houses.

OUR READING-CASES are admirably adapted for keeping the numbers of THE CHEMIST AND DRUGGIST in compact and handy form. Price 1*s.* each, by post 1*s.* 3*d.*, or two for 2*s.* 3½*d.*

ADVERTISEMENTS of situations vacant and wanted, businesses for disposal, &c., will be received by us up till the first post on Friday morning.

CORNER FOR STUDENTS.

CONDUCTED BY RICHARD J. MOSS, F.C.S., F.I.C.

QUALITATIVE ANALYSIS.

A MIXTURE of two salts will again form the subject of the exercise in qualitative analysis. The mixture is to be submitted to a thorough systematic examination; its constituents are to be detected, and all other substances proved absent.

Students' applications for portions of the mixture will be received up to Wednesday, May 21, and the samples will be forwarded immediately.

Students' reports will be received up to Saturday morning, May 31. Each report should contain a concise account of the work done, and should include a list of the constituents detected, distinguishing any which may be regarded as accidental impurities.

REPORTS.

The last exercise consisted of a mixture of lead nitrate and copper oxyacetate, in the proportion of eighty parts of the former salt to twenty of the latter. The calculated composition of this mixture is:—

Pb	50·04
Cu	9·72
NO_3	29·98
C_2H_3O	9·05
O	1·23
	100·00

The mixture also contained the sulphuric radicle and a slight trace of chlorine as impurities. The number of reports received this time was forty-eight, and in thirty-two cases the results were correct so far as the detection of the two metals and the two acid radicles was concerned; the reports differed only in the manner in which the work was done, and in the accuracy displayed in the detection of impurities. It is satisfactory to be able to record nearly 70 per cent. of fairly correct results. The two acid radicles came in for the largest share of error; six students failed to detect nitric acid, and the same number failed to detect acetic acid. Copper was detected by all except four students, and lead by all except three.

Errors in this case arose more from want of experience than from any special difficulty which the work presented. In several cases it was obvious that sulphuretted hydrogen had not been used with sufficient liberality, and the result was that some lead or copper remained in solution, and made its appearance at a later stage of the analysis. An error of this kind is easily prevented, provided the attention of the student is directed to the point, and it is experience that must be relied upon to ensure that this condition is fulfilled. The analysis of mixtures of known composition will be found the most convenient way of acquiring a knowledge of the methods of chemical analysis, and of all the various precautions to be observed in the use of reagents. In such practical work there is a great deal to be learned that is not to be found even in the very best handbooks. We therefore recommend our correspondents to rely more upon what is learned by seeing reactions, and less upon what is supposed to be learned by reading of them.

PRIZES.

The First Prize for the best analysis has been awarded to W. H. GOY, care of F. Dickinson, 13 St. Mary's Street, Stamford.

The Second Prize has been awarded to F. W. TOWAN, care of Messrs. W. Woods & Son, Bedford Street, Plymouth.

Marks Awarded for Analyses:

W. H. Goy (1st prize)	100	Valete	92
F. W. Towan (2nd prize)	99	S. H. Tottle	92
H. Hamer	98	J. Martin	92
Cyathus	98	John T. Bowker	91
A. Thorpe	98	Rhei	91
A. P.	97	Vulpes	90
Nil Desperandum	97	Sapientia	90
H. D. Kelf	96	Peter	90
A. W. Sikes	96	Cetaceum	85
H. Bowden	96	T. Guttridge	80
E. P. Greenhalgh	95	N. T. W.	75
Ert	95	Dexter	70
Dauwer	95	A. Shaw	70
Samphis	95	Patella	65
Moyhitt	95	S. Turner	65
Constant	94	M. F. C. S.	65
Fac Pacem	94	C. S. R.	65
Sprayfield	94	Experientia Do et	60
Theion	93	H. G. Woodliffe	60
A. Howard	93	Aloe	55
Sakells	93	Robert Gordon	40
Carbo	93	C. Birch	35
Lavander	92	Sweet William	30
H. W. Colley	92	Equus	30

TO CORRESPONDENTS.

Prizes.—The students to whom prizes are awarded are requested to write at once to the Publisher, naming the book they select, and stating how they wish it forwarded.

Any scientific book that is published at a price not greatly exceeding half-a-guinea may be taken as a first prize.

Any scientific book which is sold for about five shillings may be taken as second prize.

*** All communications should include the names and addresses of the writers.

H. HAMER.—Your results were good, but they were obtained by a method which was not sufficiently systematic, and which might, under slightly different circumstances, have led to erroneous results. Instead of testing the original solution to find out what caused the sulphuretted hydrogen precipitate, you should have examined the precipitate itself in a systematic manner.

H. BOWDEN.—Sulphuric acid was present in too large a quantity to be overlooked.

ERT.—If the metallic beads were large enough to be visible, they were large enough to examine as to their colour, malleability, and behaviour with reagents. The blue colour of the borax bead was by no means a negative result; it could only be produced by cobalt or copper.

MOYHITT.—The change of colour of the mercuric chloride paper may have been due to a trace of sulphuretted hydrogen, which is almost certain to have been present in the atmosphere of the room in which your work was done.

SAKELLS.—A more thorough examination for acid radicles is desirable.

VALETE.—You proved the presence of a nitrate and an acetate, but you cannot claim to have proved the absence of any of the other acid radicles.

S. H. TOTTLE.—You proved the presence of lead and copper, but you did not show that mercury, bismuth, and cadmium were absent.

J. T. BOWKER.—You confined your attention almost entirely to the detection of the two metals and the two acids. It is obvious that the analysis is incomplete unless all other substances are proved to be absent.

CETACEUM.—If potassium had been present in notable quantity, it ought to have been found in the residue left after the other metals had been separated and ammonia expelled. You might readily be misled by flame reactions in the presence of lead and copper.

T. GUTTRIDGE.—The mixture smelt strongly of acetic acid; this ought not to have escaped observation. The fact that the mixture dissolved almost completely in dilute hydrochloric acid showed that the sulphuric radicle could not be present in any considerable quantity, as lead sulphate would have remained undissolved.

N. T. W.—The nitric radicle was an important constituent, constituting nearly one-third of the mixture. It does not appear from your report that you did anything to detect it.

DEXTER.—The clearest evidence of the presence of an acetate was afforded by the smell of the original mixture, and the ferric chloride reaction was readily obtained.

A. SHAW.—See remarks to T. Guttridge.

PATELLA.—It is impossible that you could have obtained a white gelatinous precipitate such as you described, and which you attributed to aluminium. If you omitted to separate the lead completely, a white precipitate would have been produced on adding ammonia to the solution, but it would not have been gelatinous.

S. TURNER.—It was easy to obtain evidence of the presence of a nitrate; the behaviour of the powder when heated in a dry tube, and the action of strong sulphuric acid upon it, afforded results which could not be mistaken. These experiments should never be omitted in the preliminary examination of a solid.

M. F. C. S.—The precipitate which you attributed to zinc was evidently due to lead which you had failed to separate thoroughly, owing to an insufficient use of sulphuretted hydrogen.

C. S. R.—It is clear that you did not use enough sulphuretted hydrogen. To make sure that this reagent is used in sufficient quantity, you should always pass sulphuretted hydrogen through the filtrate from which the heavy metals are supposed to have been separated.]

H. G. WOODLIFFE.—See remarks to S. Turner.

ALOE.—The colour of the powder alone ought to have suggested copper.

R. GORDON.—You should not have omitted to try the reaction of the powder with the borax bead. You omitted several other important tests in the dry way from which a great deal of information may be derived with very little expenditure of material.

C. BIRCH.—You cannot have been very observant when you dissolved the powder in hydrochloric acid, or you would have noticed that a chloride was formed, which dissolved on heating the solution, and separated in acicular crystals when the liquid cooled. This reaction is characteristic of lead.

EQUUS.—It is incredible that you could have added hydrochloric acid to the aqueous solution of the powder and have failed to observe the copious precipitate that was produced, unless the solution was too hot or too dilute.

Metropolitan Reports.

A CITY SUMMER PHOTOGRAPHIC EXHIBITION, under the auspices of the Photographic Trade Section of the London Chamber of Commerce, is to be opened on May 30 in the magnificent rooms of the Drapers' Company, Throgmorton Avenue, by the Lord Mayor. The exhibition, which will consist of the most recent apparatus and materials used in photography, and also specimens of the photographic art in all its branches, will remain open until June 10. There will be no charge for admission.

WHAT THE PADDINGTON CHEMISTS THINK.—A large meeting of the chemists of the "North Paddington Division" was held on Tuesday, May 13, to discuss the draft Pharmacy Bill and the recent aspects of pharmaceutical legislation. The following resolutions were passed unanimously.

1. "That this meeting cordially approves the draft Pharmacy Bill, 1890, and will make every effort to secure its successful enactment."

2. "That the best interests of chemists are advanced by the recent judicial decisions (1) that all sales of scheduled poisons must be personally superintended by qualified persons, and (2) that all proprietary medicines containing scheduled poisons, whether stamped or not, are subject to the restrictions of the 17th section of the Pharmacy Act, 1868."

The meeting was called, we believe, by Mr. R. H. Parker, of 35 Clifton Road, Maida Vale, divisional secretary.

A FRACAS AT A CHEMIST'S SHOP.—Sidney Crouch, aged 24, of Portland Place, Clapton, was charged before Mr. Haden Corser, at North London Police Court on Monday, with assaulting Mr. Wood, chemist's assistant, of the same address. Mr. Young appeared to prosecute, and Mr. Romain to defend. The evidence was to the effect that the prosecutor, who described himself as a medical student, and admitted that he was unqualified, is in charge of a chemist's shop (Paterson & Co.'s, of Portland Place, Clapton), and the prisoner occupied the upper portion of the premises. The parties are brothers-in-law, and, whilst prosecutor contended that prisoner was but a weekly tenant, and had never paid any rent, the prisoner submitted that he was a quarterly tenant, and had advanced prosecutor money with which to pay a quarter's rent. There was also a dispute as to the ownership of some fixtures of the shop. All this culminated on Saturday in a *fracas* on the stairs, in which prisoner pitched prosecutor over the stairs because the latter endeavoured to prevent him from going to his rooms. The prisoner also threatened further violence when being charged at the police-station. In the result the magistrate bound the prisoner over in a sum of 20*l.* to be of good behaviour for six months.

THE SYPHON CASE.—The action of The Chemists' Aërated Mineral Waters Association (Limited) *v.* Dr. A. Thorburn, 101 Drury Lane, came again before Judge Eddis, Q.C., at the Clerkenwell County Court, on Tuesday. The plaintiff company seeks to recover 18*l.* 7*s.* 6*d.* for certain syphons and cases retained by the defendant. The case was referred to the Registrar to take evidence and decide on the facts, and the allegation of the defendant was that a fixture was made and the case was heard and decided in his absence. Mr. Baffen, barrister for the plaintiff company, now asked for judgment with costs, as the defendant had not shown good excuse for the granting of a new trial. Dr. Thorburn, who appeared in person, said he knew nothing of the Registrar's decision until he received notice from the court. If his counsel knew of the date it was not communicated to him. It was sharp practice, which he did not approve, and when judgment was thus obtained behind his back, in common justice the case ought to be heard by his honour in court. His honour said that any man of common sense before leaving the court would have gone into the Registrar's Court and ascertained when the case was going to be tried. Dr. Thorburn said he was prepared to prove, by four witnesses, that he at once left the court. It would be a most unjust thing to make him pay a debt that was not owing. He was prepared to contradict the evidence given by the solicitor on the last occasion. Mr. Baffen said that Mr. Lynch had told him that he knew the date of the hearing. His Honour: Then I will see Mr. Lynch and ascertain the fact for myself. It is most improper and unbecoming to hear statements made about "sharp practice" and "taking a judgment behind his back"; such language was not usually heard in a court of law. Dr. Thorburn stated that he could prove all he had said. He had been in the army, and had been commended for his truthfulness by his general. His Honour: The law in my court may somewhat differ from that in a court-martial. Dr. Thorburn: My dear sir—— His Honour: I shall not allow you or anyone to address me in such familiar terms. Your conduct has been most improper. Dr. Thorburn said if he had said anything that was distasteful to the Court he begged to apologise. He had been in the army—— His Honour: There is no better school in the world for gentlemanly manners than the army. I shall give judgment next week.

APPOINTMENT OF PUBLIC ANALYST FOR CLERKENWELL.—There was considerable interest shown in the above appointment by the Vestry of Clerkenwell at their meeting on May 8—a good whip up of members below, and a gallery full of evidently professional gentlemen. Mr. F. G. Scheib (churchwarden) was in the chair, and, in introducing the subject, called upon the clerk (Mr. R. Paget) to read the following letter:—

2 Fisher Street, Red Lion Square,
R. Paget, Esq., Vestry Clerk. April 29, 1890.

DEAR SIR,—When you informed me that your Vestry had not re-elected me as their public analyst, but were opening the appointment to other gentlemen, I, of course, considered that my name would be submitted as an intending candidate for the vacant position. Understanding that it was omitted at the last meeting, I now ask that it may be placed upon the list, as I am willing to continue to serve the Vestry in this very important and responsible position. T. REDWOOD.

Mr. Kelly said the name of Dr. Redwood was before the Vestry at the last meeting. Mr. Ross: And he is now too late in his application. Let's have a young man. Mr. Walton: Surely you will try to be fair to a man who has served you well in years gone by. I shall move that Dr. Redwood's name be added to the list. Mr. Putterill seconded, on the ground of Dr. Redwood's claims as an old officer of the board. Mr. Ross: Professions are overstocked unfortunately; and, when old men have held appointments for a

long time, they should make way for young ones. Mr. Atkinson submitted that the Vestry would be doing a very unjust thing if they did not allow Dr. Redwood to be a candidate simply because he had not sent formal application in time. A vote was taken, with a large majority against Dr. Redwood. Mr. Ross: Now let's vote for a Clerkenwell man. Mr. Walton: We don't want Clerkenwell men. We don't want an analyst close to our doors. Mr. Ross (ironically): Of course I didn't look at it in that way. I thought we were going to have an honest man. The following names were then submitted to the vote:—

Mr. Wm. Chattaway, F.I.C., A.S.P.A., member of Pharmaceutical Society, and member of Society of Chemical Industry.

Mr. J. K. Colwell, Ass.I.C., A.S.P.A., Public Analyst for Bedford; is in charge of St. Marylebone Laboratory.

Mr. C. H. Cribb, B.Sc. (Lond.), F.C.S., F.I.C., M.S.P.A., Public Analyst for Strand district.

Mr. W. Johnston, F.I.C., F.C.S., F.G.S., M.S.P.A., and Society of Chemical Industry.

Mr. J. P. Laws, F.I.C., F.C.S.

Mr. A. P. Luff, M.D., B.Sc. (Lond.), M.R.C.P., M.R.C.S., L.S.A., F.I.C., F.C.S.

Mr. A. W. Stokes, F.I.C., F.C.S., M.S.P.A., Public Analyst for Paddington and St. Luke's.

Mr. J. Wilkie, F.C.S., M.C.S.

There were thirty-one votes in favour of Mr. Colwell, and not half-a-dozen each recorded in favour of the other candidates. Mr. Colwell was consequently declared elected, and called before the board to receive his appointment. Mr. Colwell said he thanked the board for the honour, and would endeavour to do his duty as well as he possibly could. He was a young man, and therefore should use all his exertions to merit the confidence bestowed. With regard to the word "jobbery," which he had heard a member apply to the matter—— Mr. Walton: I protest! This gentleman is not a member of the board. Mr. Ross: No; he was in the ratepayers' gallery, but is supposed not to have heard what was said in debate. (Laughter.) Mr. Kelly: I am told that Mr. Walton says it is a planned job. I never saw Mr. Colwell in my life until last Tuesday; but he is a capital fellow, and I am glad he has the appointment. Mr. Ross: I voted for him because he is a Clerkenweller, and has all the qualifications for the appointment. Mr. Colwell then retired, and the next business was proceeded with.

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor will much oblige.

BIRMINGHAM.

MIDLAND COUNTIES CHEMISTS' ASSOCIATION.—The annual meeting of this association will be held on May 20.

HOSPITAL SATURDAY.—On Saturday last the usual annual collections for the local medical charities took place, and nearly 9,000*l.* was collected.

CHANGES.—Mr. Whitehouse has bought the business which Mr. Dancer held for some time after Mr. Bolas' death, Icknield Street. Mr. Barlow has purchased the business of Mr. Cooke, Balsall Heath Road, and put in a qualified manager. It is not far from his own shop.

THE CRICKET SEASON.—The secretaries of the M.C.C.A. are negotiating for a more convenient cricket-field (nearer to town), and they hope to be ready for the usual Married *v.* Single match early in June. Each side has received some formidable "freshmen."

THE WORD-PUZZLE TRICK.—An advertisement in a local paper offered 1*l.* for each correct answer to the following:—"H*D**N'S W****NG P**D*R. Insert letters for stars, forming three words." With each guess 6*d.* was to be sent. A Handsworth shopkeeper consented to receive letters for a young lady, not knowing what the game was. Over a hundred arrived in a couple of days, and then he refused to take in any more. Of course everybody guessed "Hudson's washing powder," and of course everybody was wrong. The words intended were said to be "Hodman's wearing powder."

BRIGHTON.

ASSOCIATION OF PHARMACY.—A well-attended meeting was held at the Athenæum, on Wednesday evening, May 14, Mr. W. D. Savage, J.P., President, in the chair. After the routine business, the Treasurer reported a balance in hand of 24*l.* 16*s.*, and on the motion of Mr. W. D. Savage it was decided to continue to offer prizes of the value of one guinea and half-guinea to the students attending the chemistry class of the School of Science and Art. On the motion of Mr. Williamson, it was also decided to hold the annual chemists' dinner on Friday, June 6, Messrs. Histed, Williamson, Costerton, and Marshall Leigh (hon. secretary) being appointed to make arrangements. A discussion next arose upon the annual report of the Pharmaceutical Society; and after Messrs. Savage, Williamson, Histed, Gwatkin, and Leigh had spoken, Mr. Williamson moved the following resolution, which was carried unanimously:—

> That this meeting, whilst approving generally of the report of the Pharmaceutical Council, regrets to see the continued falling-off of members, and desires to suggest that some steps be taken to secure the adherence to the Society of a large number of the trade, and with this view would suggest that all associates of the Society be granted the privilege of voting, and that associates in business be made eligible for election on the Council.

LIVERPOOL.

POISONING BY CARBOLIC ACID.—On May 9 Mr. J. Brighouse, coroner, held an inquest at the Town Hall, Southport, on the body of Mrs. Margaret Malcolmson, who committed suicide on the preceding Wednesday morning by drinking a quantity of carbolic acid. In a box near her bed was found an 8-oz. bottle half full of the deadly fluid, and also a glass tumbler which had contained the remainder. Deceased was of intemperate habits.

THE TELAUTOGRAPH.—Mr. Thomas O'Brien, of this city, has recently established before the Comptroller of Patents his claim to be the original inventor of this instrument, which is said to accomplish the sending of autograph messages, drawings, plans, &c., by telegraph. The principle consists in actuating the receiving instrument by means of transient electric currents or pulsations produced at the transmitter by means of a pen; these, operating on electro-magnets, move a writing pen at the receiving end. Mr. O'Brien is now completing working instruments, which will be exhibited in London in the course of a month or so.

NEWCASTLE-ON-TYNE.

VISIT OF STUDENTS TO FRIARS GOOSE WORKS.—On Saturday morning the senior students in chemistry in the Royal Grammar School, Newcastle, accompanied by their science master, Mr. F. Swann, B.A., B.Sc., were conducted over the Friars Goose Chemical Works, Felling, when the various processes which are carried on at these works for the recovery of sulphur from the tank waste, were inspected and explained by Mr. France, technical manager of the works.

SHEFFIELD.

DRINKING LIQUID AMMONIA.—At the Sheffield County Court, May 8, a mechanic named George Manton, of Jericho Street, sued Mr. C. H. Lee, 29 Cavendish Street, manufacturer, for 10*l.*, as damages for an alleged assault committed upon him on March 6 last, by giving him some liquid ammonia to drink, he being without the sense of smell, and thereby severely injuring him. The plaintiff, and Mr. Wilson on his behalf, stated that the defendant, in his workshop, produced the bottle of ammonia, and asked him to drink. He at first refused, but afterwards drank from the bottle with the result as stated. He was in the hospital three weeks. Mr. Clegg, for the defence, denied that his client asked plaintiff to drink, and further stated that he

endeavoured to take the bottle away from him when he saw him taking a drink, but this he failed to do before plaintiff had swallowed some. After hearing both sides, the judge said he did not like the manner in which the evidence for the defence had been given. It seemed to have been prepared. Judgment was reserved.

WORCESTER.

SUDDEN DEATH OF A CHEMIST'S ASSISTANT.—Mr. Willaim Thorpe (24), an assistant to Mr. E. J. Kitson, chemist, 1 Broad Street, Worcester, died very suddenly in the Bull's Head Inn on Monday evening. While sitting in the smoking-room talking on trade matters with Mr. John Hunter, a fellow assistant, Thorpe sank back on his seat and fainted. Medical assistance was at once called, but Thorpe died within five minutes. At the inquest held on Wednesday Mr. H. G. Budd, surgeon, stated that there was no evidence of hydrocyanic-acid poisoning; he attributed death to paralysis of the heart. Mr. John Hunter, who had been a fellow assistant of deceased's for two and a half years, said the deceased was in the smoke-room of the inn when he went in, and witness invited him to have a glass of beer with him. The deceased had drunk part of the beer when he leaned back gasping in his seat. Witness loosened deceased's clothing, and poured some brandy down his throat. He was then in the paroxysm. Deceased was slightly disturbed about not having passed his professional examination, and had that day given notice to leave Mr. Kitson's, as he wished to get a place where he would have more time to study. He was rather depressed, and was applying for a situation at the Army and Navy Stores, Westminster. Mrs. Thorpe, the widow of deceased [they had been married only a few months], stated that her husband had had two or three sudden attacks, and had often complained of something the matter with his heart. Mr. Kitson, who was deeply affected, said that deceased had been with him three years, and he had very great respect for him. He had been a steady and well-conducted young man. The jury returned a verdict of "Death from natural causes."

IRELAND.

BEET-GROWING IN IRELAND.—A project to grow beetroot in Ireland and manufacture sugar from it is under consideration.

CONTRACT.—Tenders for drugs and medicines are invited by the guardians of the Gorey Union, the contract to date for a year after June 2 next.

TRANSFER OF PREMISES.—Mr. T. W. Robinson, L P.S.I., has taken over the Medical Hall, Upper George Street, Kingstown, lately conducted by Mr. J. Evans, State apothecary.

DEATH OF A LEPER.—John Murphy, the Irish leper, whose case recently attracted widspread attention, died last week at Dublin. The deceased, an army pensioner, contracted the malady in India.

THE EXPLOSIVES ACT.—For causing an explosion with chemicals at Macroom, calculated to injure life and property, a man named Lyhane has been prosecuted under the Explosives Act and returned for trial on the charge.

THE HALF-HOLIDAY MOVEMENT.—A petition, signed by nearly 1,500 assistants, and sent away last Saturday from Dublin to Sir John Lubbock, Bart., in favour of a weekly half-holiday, included the signatures of fifty representatives of the drug-trade.

DEATHS.—The deaths are notified of the following dispensary officers:—Mr. R. C. Bolton, L.A.H, Doneraile; Mr. John M. Clung, Carrickmore; Mr. Patrick McDonnell, Quin, co. Limerick; and of Mr. W. J. Wheeler, chemist and aërated-water manufacturer, Belfast.

PRESENTATION TO AN APOTHECARY.—Last Saturday, at Dublin, Mr. G. A. Paton, L A.H, apothecary to Mercers' Hospital, was the recipient from the staff of a testimonial, consisting of an address and handsome gold watch, presented on the occasion of his resignation for a more lucrative position.

THE VALUE OF A CHEMIST'S MANAGER.—In the Belfast Bankruptcy Court, an application was made lately in *re* W. Hanbury, chemist, bankrupt, on behalf of Dr. Whitaker, who, in accordance with the direction of the court, had carried on the business of Wheeler & Whitaker, High Street, from September 5 until March 3, and who now claimed remuneration at the rate of 5*l.* a week, or 130*l.* in all. The counsel for the assignees objected to the amount, and said that the money in the assignees' hands was only 669*l.* and out of this 150*l.* had to be paid for rent, and 50*l.* for taxes. The business was carried on as much in the interest of Dr. Whitaker, a creditor to the extent of 1,253*l.*, as in the interest of the estate. It was also stated that the business had been carried on at a loss. The Judge decided to grant only what he allowed to Mr. Hanbury while he continued the business himself—2*l.* 10*s.* per week. The costs of the application were allowed to Dr. Whitaker.

PHARMACEUTICAL CHEMISTS AND APOTHECARIES.—In the House of Commons last week, Mr. W. Abraham asked the Chief Secretary whether he was aware that in August last there was a vacancy for the office of apothecary in Rathkeale Dispensary, co. Limerick, and that advertisements were published requiring candidates to have the qualification of "apothecary;" that there were only two applicants, one of whom was not qualified as an apothecary; that the latter, notwithstanding his want of qualification, was elected by a majority of the Dispensary Committee, but the election was set aside by the Local Government Board; if he could explain why, under the circumstances, Mr. Cahill, the other candidate, who was the only applicant qualified in accordance with the requirement of the advertisement, was refused the appointment; why another election was ordered, and the new advertisement so framed as to render the formerly disqualified candidate eligible for election; whether he was elected, and what precedent there was for so acting under the circumstances. Mr. Balfour said the facts were substantially as stated in the first paragraph of the question. Mr. Cahill did not obtain the requisite majority of votes, and his claim to be elected could not therefore be admitted. It was necessary, therefore, to proceed to a new election, and the Dispensary Committee decided to elect Mr. Whelan, who was qualified as a pharmaceutical chemist. The Local Government Board approved the appointment, which was made in September last.

SCOTLAND.

ABERDEEN.

MR. A. F. DUGAN has secured the medicine contract for the south division of the Old-Machar parish, at 45 per cent. off usual prices; and to Mr. R. Hall, Woodside, is awarded the contract for the north division, at 25 per cent. off.

BONAW (ARGYLLSHIRE).

MR. SAMUEL LAWRENCE, chemist, Oban, who opened a branch establishment in Taynuilt last season, has now erected a neat and attractive shop opposite the Taynuilt post-office. The new shop is from the designs of Mr. D. Mackintosh, architect, Oban. The style is neat, and of classic appearance. Mr. Lawrence has also started a house agency for the district, to accommodate the numerous inquirers after summer quarters.

EDINBURGH.

RAISING THE DOSE.—A very eminent medical man here is prescribing sodium salicylate in doses of sixty grains. He advises a pharmacist that he need not be surprised if he see in his prescriptions doses of as much as eighty grains of sodium salicylate or salicylic acid.

CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.—The annual business meeting was held on Wednesday, May 7, at 9.15 P.M., Mr. A. R. Bennet in the chair. The Prize Committee reported that as the result of an examination the "Ainslie" prize had been gained by Mr. William Smith, 119 George Street, with 89·5 per cent. of marks; the second prize by Alexander Cruickshank, 56 Newington Road, with 78 per cent.: and the third by Mr. Andrew Gilmour, Burntisland, with 66 per cent. To the first prizeman Bentley's "Botany," Bentley's "Organic Materia Medica," Balfour Stewart's "Physics," and a copy of "The Art of Dispensing" were presented; to the second prizeman, Attfield's "Chemistry," and to the third, a copy of the "British Pharmacopœia, 1885."

Mr. Wm. Aitkin handed over the volumes. The financial statement showed a balance of 6*l.* 19*s.* 4*d.*, as against 1*l.* 6*s.* 4*d.* last year. The annual report was very satisfactory, the membership being up to last year; but the committee recommended that an effort should be made to increase it. The meeting having arranged a scheme of botanical excursions, the office-bearers for the ensuing session were elected as follows: President, Donald McEwan; vice-president, Jeremy Blenkiron; secretary, John Findlay; assistant-secretary, Alexander Leys; treasurer, James H. Hoseason; and as members of committee, Messrs. Cowie, Dey, Findlay, Gillies, Macdonald, Parker, Robertson, and Wright. The following were also elected members of the Prize Committee:—Messrs. Bennet, Boa, and Duncan. An attempt to get office-bearers elected by ballot in future failed to catch the sympathy of the members, and was dropped.

THE BOTANICAL EXCURSIONS arranged by the Assistants' Association were resumed on Wednesday morning. In the course of the summer there are to be excursions to Colinton Dell, Duddingston Loch, Blackford Hill, Craigcrook, and Poet's Glen, Currie. The company numbered thirty, and spent about two hours and a half in the garden. The most interesting specimens were some fine plants of *Podophyllum emodi* in fruit on the rock-garden, and two flowering specimens of the curious New Zealand plant, *Aciphylla squarrosa*. The whitish, long, narrow, stiff, and very sharply pointed, grass-like leaves of the latter bear very little resemblance to ordinary umbelliferæ (to which it belongs), but there could be no mistake about the dense spike of yellowish-flowered umbels, which seems to rise from the side of the pyramid of prickly leaves. The next excursion is an evening one to Colinton Dell, on May 28, by Caledonian train, at 8.35.

GLASGOW.

THE PHARMACY ACT IGNORED.—A correspondent of one of the Glasgow evening papers, signing as "Verum Est," is much concerned "by the haphazard sale of medicines and poisons" in that city. He asserts that, out of about three hundred chemist's and druggist's shops in Glasgow district, he does not think thirty are conducted by qualified chemists! Two-thirds of these shops belong to, or are in charge of, unqualified men, who have not even passed their Preliminary or Minor examinations under the pharmaceutical regulations, and these are assisted by lads who know nothing whatever of the medicines they sell. He cannot understand why this state of matters is allowed to go on, and asks—Is there no judicial functionary whose duty it is to examine into this matter?

SELLING METHYLATED SPIRITS ON SUNDAY.—Robert Wilson, druggist, 353 Garscube Road, pleaded not guilty, at the Justice of Peace Court, on May 8, to the charge of having, on Sunday, February 16, sold to Thomas Devine, moulder, 268 Garscube Road, half a gill of methylated spirits, whereby he rendered himself liable to a penalty of 100*l.* The supervisor of the Inland Revenue stated that the respondent was furnished twice with a notice of the provisions of the Act prohibiting the sale of methylated spirits on Sunday. Evidence of the purchase was given, but Wilson said Devine asked for methylated spirits and camphor, and that was what he was supplied with. James Cameron, analyst in the laboratory at Somerset House, said he analysed the contents of the bottle sent to him by the Revenue people, and found that it was ordinary methylated spirits, with a trace of gum in it. The charge was found proven, and a fine of 25*l.* imposed, with the alternative of two months' imprisonment.

LOVE-POWDERS.—A correspondent of the *Medical Brief* wants a receipt for "love-powders," and this is what is said to him in reply by an M.D. The following formula has never been known to fail, if properly prepared and used as directed: Take the blood of a wooden mallet, brains of an iron wedge, stir them up in a hog's left ear with a blue cat's feather, percolate through the skin of a 3,000-year-old Egyptian mummy of a female persuasion, evaporate for ninety-nine years, then pulverise in the left hind hoof of a common house-fly. Dose, sixteen ounces three times a day, always before breakfast.

General News.

TRADE-MARKS have been taken out in Germany, by the Farbwerke of Meister, Lucius and Brüning in Höchst o/M, for two new preparations supposed to be intended for use in medicine. They are called "Phthiosot" and "Benzosol."

MR. C. F. W. MEISTER, one of the original founders of the Höchst factory, has just retired from the active partnership on the ground of advanced age. At his retirement he placed a sum of 100,000 marks at the disposal of the board of directors for the purpose of establishing a home for old workmen of the factory.

GERMAN BOTTLES.—An advance of 10 per cent. in the prices of bottles is announced by a circular signed by 44 of the principal German glass-bottle factories. The reasons given for the advance are the increased cost of fuel, raw materials and wages.

WARNER'S SAFE CURE.—The Austrian Ministry of the Interior, being the highest court, has confirmed the judgment of the Vienna magistrates prohibiting the sale of Warner's Safe Cure, manufactured in Frankfort-on-Maine, and has extended the prohibition to the whole of Austria.

A SPONGE EIFFEL TOWER was the attractive feature of a Philadelphia pharmacist's window lately. The *Druggists' Circular* states that the display was composed of the finest quality of sponges ever seen in the United States. Many thousands of pedestrians looked upon the display daily, and the commendations were frequent.

FIRE.—On Friday of last week a fire broke out at the shop of Mr. W. A. Holmes, chemist and druggist, No. 21 The Drapery, Northampton, but was quickly suppressed. The fire, it was supposed, was caused by the overheating of a gas-stove. Some of the stock was injured by the fire and water, but the damage was covered by insurance.

THE CAMPHOR TREE appears to be doing well in Florida. Several of them are growing in the neighbourhood of St. Francis, according to *Florida Facts*, and were not injured in the least by the recent cold weather. It yet remains to be demonstrated, some time in the twentieth or twenty-first century, whether camphor can be produced in America on a paying basis in competition with Japan.

PHARMACY PROTECTION IN AMERICA.—An attempt has been made in the Massachusetts House of Representatives to limit the number of pharmacies in the State, but it has been ignominiously beaten. It was proposed to have one pharmacy for every 3,000 inhabitants, and the movers were willing to come down to one to 1,500; but the House was opposed to the principle in any form, and almost unanimously so declared.

SHOPS (WEEKLY HALF-HOLIDAY) BILL.—Sir John Lubbock moved the second reading of his Bill on May 9, suggesting that this and Mr. Blundell Maple's Bill should both go for consideration to the same Committee. The Bill was opposed by Mr. Kelly, the member for Camberwell, and it being past the hour when an opposed Bill could be discussed, the second reading was postponed.

SHE COULD NOT RECOVER.—At the Bolton County Court, May 7, Ann Lomax, described as a maker of plaster, ointment, pills, and medicine, of Rix Street, sued John Wareing, tackler, Bank Top, Sharples, for the sum of 26*l.* 1*s.* for ointment, pills, plasters, medicines, lotions, and two months' treatment for cancer. The plaintiff stated that she practised as a doctor, but the judge held that she could not recover in that capacity, and she was nonsuited.

CHARGE AGAINST A CHEMIST'S ASSISTANT.—At Woolwich Police Court, May 8, Edward A. Lamb, chemist's assistant, 378 Brixton Road, was brought up on remand and charged with concealing the birth of his illegitimate child, and unlawfully disposing of its body by burying it in his father's garden. Charlotte Radley, a fellow-servant of Clara May, the mother of the child, gave evidence as to its birth, and to the defendant taking the body away. The prisoner was again remanded on bail, it being understood that he will be committed for trial.

TANNIN is the latest thing which has been proposed for the manufacture of smokeless powder. Sir F. Abel and Professor Dewar have patented a composition consisting of 90 parts of gun-cotton and 10 parts of tannin. Solvents are used to bring the two bodies together, and nitro-glycerine may be employed also. The patentees state that gun-cotton and tannin produce a compound which, when the solvent is eliminated by extraction with water or by evaporation, or both, is a tough, hard substance that can be granulated or otherwise treated for use as an explosive.

THE ADULTERATION OF CUTCH.—Letters recently received here from Rangoon state that the adulteration of cutch is still practised very extensively, and that a new adulterant has recently been discovered. This is an aqueous extract from the "Lain" tree, which is supposed to be superior to the "Than" as far as dyeing is concerned. This "Lain" extract is boiled up with good cutch, and the out-turn poured into bags which are lined top and bottom with stiff basket cutch, the adulterating ingredient being placed in the middle. Cutch packed in boxes is also being adulterated in the same manner.

NEW FLASH-LIGHT.—Dr. Thomas Taylor has described to the Washington Chemical Society a new flash-light intended to take the place of several kinds which have proved highly dangerous. It consists largely of charcoal made from the silky down of the milk-weed—a form of carbon which Dr. Taylor prefers to all others, because of its freedom from ash. A few grains of this composition placed on tissue-paper, and lighted by a "punk-match," produces a prompt and blinding flash. The paper on which the powder rested is not even scorched. The flash being instantaneous, the heat is not sufficient to ignite the most inflammable material on which the powder may rest.

POISONED BY JEQUIRITY SEEDS.—An inquest was held at Sunderland on May 10, on the body of Richard H. Nisbett, aged 7, who died on Sunday last, apparently from the effects of eating some jequirity seeds, which had been given to him by a schoolfellow. The boy ate the seeds on Thursday of last week, and at once became sick; but as it was thought he was only suffering from an ordinary stomach-disorder, a doctor was not called in till Saturday, and it was then too late. Dr. Blair, who attended the boy, said the symptoms of the poison might have been mistaken for biliousness. He had examined some of the seeds, and found them to be jequirity seeds. A verdict of "Death from misadventure" was returned.

A CHEMIST SUED BY A PRINTER.—At the Tunstall County Court on May 7, Albert Dobson, printer, Hanley, sued William Shirley, manufacturing chemist, Burslem, for 2*l.* 5*s.* 8*d.*, for printing 20,000 labels for him as manager to the White Swan Bitters Company. No complaint was made about the labels until about six weeks ago, when payment was asked for. They were printed according to order. The defendant said the proof was brought and amended by him. He told plaintiff that the labels were not large enough to cover the boxes for which they were intended, and sent a box to plaintiff's works. When the lot were sent he found they did not fit the boxes. His Honour was of opinion that the labels were near enough to fit, and gave a verdict for plaintiff with costs, at 10*s.* per month.

LABELLING MEDICINES.—Mrs. Birnie, the wife of a waterside labourer residing at St. George's-in-the-East, got some medicine, said to have contained jalap, from the doctor at Dr. Barnardo's Mission. She became worse, and the parish doctor sent her to the infirmary, where she died. An inquest was held last week, when the medical superintendent of the infirmary stated that death was due to acute enteritis. What that was caused by he could only conjecture. The condition of the intestines would point to the woman having taken some strong aperient such as jalap. The husband, recalled, said that the powder was not labelled in any way. The jury found that death was due to exhaustion, following acute enteritis, set up by an overdose of some powder, the contents of which are unknown, and requested the Coroner to write to Dr. Barnardo's Medical Mission, and point out the advisability of labelling all their medicines.

HYDROGEN PEROXIDE IN ETHER.—Messrs. Dunstan and Dymond have continued their investigation on this subject, and communicated their results to the Chemical Society on May 1. They state that pure ether does not form hydrogen peroxide when exposed to light. In the discussion which followed Professor Ramsay commented on the great difficulty of rendering ether absolutely pure. Professor Young and he had prepared ether from alcohol and sulphuric acid, and, after washing it with potash and with sulphuric acid, had found it necessary to agitate it about fifty times with water before the iodoform test ceased to afford evidence of the presence of alcohol. Proof that such ether was pure was afforded by the agreement of the determinations of its vapour-pressure made by the static and dynamic methods: four specimens were found to give identical results. This recalls the difficulty which Mr. Proctor experienced when he was experimenting with tannin.

HOP SUBSTITUTES.—At one of the sittings of the Select Committee on the hop question, Dr. Bell, of Somerset House, stated that he could tell whether a beer contained any bitter other than the hop bitter. Sir Henry Roscoe appeared to be sceptical about this statement, but Dr. Bell repeated that he was in a position to say from the result of experimenting on four substitutes—quassia, chiretta, gentian, and calumba—that he could distinguish them from hops, but not from one another. He thought, further, that there was a possibility of finding some test whereby substitutes could be detected in any quantity with certainty. Mr. Richard Bannister, Dr. Bell's colleague, corroborated. They had not worked upon quantities such as those which would be used in brewing. It would be necessary to make further experiments before he could give any information as to the mode of detecting these ingredients in such quantities as would be found in beer. It was the opinion of both witnesses that less hop is now used than formerly, owing to the demand for lighter beer.

BREACH OF PROMISE.—John Lloyd Lewis, a chemist at Aberayron, was sued in the Queen's Bench Division, London, last week, before Mr. Justice Cave and a jury, by Miss Margaretta Griffiths, for damages resulting from a breach of promise of marriage. While John was a student at the Westminster College, Trinity Square, "trying for the L.P.S.A." (he said), and before, he wrote letters on which this action was founded. Some of these were copied *verbatim* from Ward & Lock's "Letter Writer's Companion and Correspondent's Guide." The one containing the proposal of marriage was signed "Your attached chemist, J. L. Lewis." In one letter he informed the plaintiff that "chemists, as a rule, always make an engagement five or ten years before marriage," adding, "I consider it the proper thing, hoping that you have got the same idea." He had since married and set up in business. Mr. Crump, for the defendant, contended that it was a mere flirtation between a girl of 16 and a boy of 21, that the engagement had been mutually broken off, and that the plaintiff had suffered no damage. In the result the jury found for the plaintiff, damages 40*s*, and judgment was given for that amount, with costs.

A GIRL COMMITTED FOR POISONING.—At Haverfordwest Petty Sessions, on May 12, Sarah Ann Thomas, aged 14, was charged with attempting to poison her master, Mr. D Evans, veterinary surgeon, and his infant son, aged two and a half years. The girl entered the service of Mr. Evans on February 25 last as nurse-girl, and a few days after the little boy was taken ill after drinking some milk, and had a convulsive fit. The doctor and a professional nurse were sent for, and the child recovered. On March 12 Mr. Evans drank a cup of tea, brought to him by the prisoner, and later in the day he became ill, and vomited. Again, on March 14, some water which the prisoner brought to drink tasted bitter. The day after the same thing was noticed when some bovril was brought to Mr. Evans by the prisoner, and he did not swallow any. On March 19, after tasting some rhubarb, Mr. Evans, his little son and the professional nurse were all affected with blisters on the mouth. Mr. Evans then asked the prisoner what she had put in the rhubarb, and she admitted having put poison, which she got from the surgery, into the child's food, but said she had not put any into that of Mr. Evans. The foods in which the poison was detected were sent to the analyst, Mr. S. Morgan, who said that in the bottle sent to him, which contained about two ounces and a half of prepared bovril, he found 1 grain of strychnine. In the stewed

rhubarb he found 20 per cent. acetic acid and some carbolic acid. After hearing further evidence, the prisoner was committed for trial, bail being accepted.

A Convention Has Been Arranged among the principal German soda-factories. The central office of the ring is in Bernburg, and the object of the convention is the regulation of the output and sale of ammonia soda and soda crystals throughout Germany. The new firm, which comprises eight works—viz., the German Solvay Works, Bernburg; Chemical Works, Buckau; R. Sourmondt & Co., Montwy; the Nüremberg Soda Works; Engelcke & Krause, Trotha; Rothenfelder Company, Rothenfelde; G. Egestorff's Salt Works, Linden; and the Chemical Factory, Schöningen—will be known as the "Syndicate of German Soda-works," and is under the management of Dr. Karl Wessel, in Bernburg. The Leblanc Works are outside the combination.

Cherry-blossom Cases.—At the West Ham Police Court on Thursday a herbalist was charged, at the instance of John Gosnell & Son, with obtaining money by means of false pretences; and on the same day at the Southwark Court a hawker was similarly charged. It appears from the evidence that the herbalist was selling 1*d.* packets of hop bitters and tooth-powder at Barking, stating that he was authorised by John Jephson & Co., of Thames Street, to sell Cherry Blossom tooth-paste at a reduction of 5*d.* per box. The prisoner in this case was remanded. The Southwark hawker, it appears, held forth at Southwark Park Road to people gathered round him, that he would give a 6*d.* pot of Cherry Blossom tooth-paste for 1*d.* What he actually did give was a box containing, according to Mr. Harland, public analyst, earthy matter and chalk, which would cost less than ¼*d.* per dozen boxes. The hawker was committed for trial.

Dispute between American Wholesale Druggists.—Some time ago the wholesale drug firm of Farrand, Williams & Co., of Detroit, U.S., announced that they had disposed of their business to Messrs. Williams, Sheley & Brooks, all members of the old firm, who would continue to carry it on in the old style. Mr. Farrand, one of the retiring partners, subsequently organised a new firm, which adopted the name of Farrand, Williams & Clark, and commenced trading in the same articles as the original house and in competition with it. The original house has now commenced an action against the new firm in the circuit court in Detroit, on the ground that the name under which the new firm proposes to transact business is misleading in its character, and asks that an injunction issue restraining the new firm from using the name under which the old house was known for many years. The bill of complaint states that the firm of Farrand, Williams & Co. was organised in 1860, but that it it was known as Farrand, Sheley & Co. until 1870, when it was changed to Farrand, Williams & Co. The members of the firm at that time were Alanson Sheley, William C. Williams, Jacob S. Farrand, Harvey C. Clark. On January 25 last, it further says, Jacob S. Farrand submitted a proposition from himself, Jacob S. Farrand, jun., R. P. Williams and H. C. Clark to pay the other members of the firm—Sheley and Brooks—$60,000 for their share in the business; or, if that was not satisfactory, the first-named members would sell out to the other two for $120,000. The latter proposition was accepted. One Williams went out, and one remained with the old house. The complaint now is that Williams, Sheley & Brooks purchased the good name of the firm when they bought the interests of the outgoing members, and that the name of the new firm is misleading, and therefore injurious. Farrand, Williams & Clark are charged with using a similar style of stationery as the old firm, and also that they are advertising themselves as "the oldest and the youngest drug-house in Detroit," and sending out circulars asking for a continuance of the friendly acquaintance with the trade which "has been enjoyed for many years."

Drysaltery Prosecution in Bradford.—A case which excites considerable interest in commercial circles in the Midlands is now proceeding before the Bradford magistrates. The suit is brought at the instance of Messrs. Lister & Co., Limited, of the Manningham Mills, and the accused are Francis Stubbs, a foreman dyer, late in Messrs. Lister & Co.'s employ, and Henry Varley, a Leeds drysalter. It is alleged that Stubbs, who had the technical control of an important department of Messrs. Lister's works, and to whom was entrusted the duty of purchasing the dyestuffs required in that department, conspired with Henry Varley to defraud Messrs. Lister by an organised system of overcharging on the materials ordered, the plunder being afterwards shared by Varley and Stubbs. Among the evidence offered at the last hearing of the case were statements to the effect that among the dyestuffs largely used by Lister and Co. was sumach, the market price of which never, during the period over which the charges extend, had exceeded 13*s.* 3*d.* per cwt., but the charge made by Varley was 15*s.* per cwt., the difference of 1*s.* 9*d.* being divided between Stubbs, who received 6*d.* per cwt., and Varley, who took the remaining 1*s.* 3*d.* The total sum paid in excess on that article alone was 105*l.* 17*s.* 11*d.* Cutch was another article supplied, the regular market price of the variety used by Lister & Co. being 27*s.* 6*d.* per cwt.; but although the whole of the other customers of the firm of Varley had only paid 27*s.* 6*d.*, the price charged Lister & Co. was 37*s.* per cwt. Stubbs' allowance of that excess price was 1*s.* a cwt., and there was a total amount of 84*l.* 15*s.* paid in excess on that item. The highest price paid for fustic in the whole of Yorkshire was 6*s.* 6*d.* per cwt., and the price charged to Lister was 9*s.* 6*d.*, Stubbs receiving 3*d.* per cwt. and Varley 2*s.* 9*d.* The total excess paid was 98*l.* 16*s.* 3*d.* There was a dye called fast red, which it was alleged that Varley purchased at 3*s.* per lb., and allowing a fair profit of 9*d.* per lb., 3*s.* 9*d.* would be a fair price to pay. The price charged Messrs. Lister was 7*s.* 9*d.* per lb., and of the excess of 4*s.* Stubbs received 1*s.* 6*d.* per lb. and Varley 2*s.* 6*d.* 636*l.* on this item alone was paid in excess. There was a dye called "Blue 00 x," manufactured in Germany by a firm who had an agent in Bradford named Kilner. This article could be supplied at from 5*s.* 6*d.* to 5*s.* 9*d.* per lb., but it would be shown that the price charged to Lister & Co. was 18*s.* 6*d.* per lb. The excess paid on this item was 1,038*l.* The total amount thus received in excess during the twelve months over which the prosecution extended was 1,961*l.*, and of that Stubbs received 637*l.* 1*s.* 11*d.* and Varley the balance. The interesting point involved in the prosecution is whether, supposing the charges to be sustained, Messrs. Lister & Co. will be able to recover the excesses proved from the estates of Varley and Stubbs. The latter had a salary of 550*l.* per annum as foreman dyer at Lister's, and it is charged that the alleged frauds have been going on for years, although the prosecution only refers to charges made since, about a year ago, the business of the prosecutors was turned into a limited company.

EXTRACT FROM THE REGISTER OF DEEDS OF ARRANGEMENT.

The following deeds of arrangement with creditors have been filed at the Bills of Sale Office, under the provisions of the Deeds of Arrangement Act, 1887. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision, in the Act, making any of these arrangements binding upon dissenting creditors.

Thompson, George, 3 Queen Street, and New Market Hall, Hull, family and dispensing chemist. Trustee. T. F. Judge, Hull, C.A. Date, May 10; filed, May 12; unsecured liabilities, 359*l.* 0*s.* 8*d.*; estimated net assets, 66*l.*; creditors fully secured, 35*l.*

	£	s.	d.
Allison, E. & H., Hull	36	5	5
Blanshard, F., East Halton	50	0	0
Evans, Lescher & Webb, London	10	17	10
Gilbey, W. & A., London	20	15	6
Hull Banking Company, Hull	20	1	0
Hull Corporation, Hull	26	16	3
Hull Express, Hull	18	0	0
Lofthouse & Saltmer, Hull	23	6	4
Wilkinson, —, Pendleton	17	6	2

Legal Reports.

The Bull's Head Trade-Mark.

On May 8, before Mr. Justice Stirling, application was made on behalf of Mr. Joseph Farrow, a mustard grower and manufacturer, asking that the Comptroller-General of Trade Marks might be directed to proceed with the registration of a trade-mark consisting of the representation of a charging buffalo. The Comptroller had refused to register the mark, on the opposition of Messrs. Colman, who objected to it on the ground of resemblance to their Bull's Head trade-mark. Mr. Justice Stirling said the two marks were very different the one from the other, but the words of the Act of Parliament had received judicial interpretation by the Court of Appeal in at least two cases, and by that interpretation his lordship was bound. In the case of "Worthington & Co.'s Trade Mark," the applicants, brewers, proposed to register as a trade-mark for ale a triangle having within it a representation of Beccles church. Messrs. Bass & Co., whose mark consisted of a plain triangle, which in use was coloured red, opposed. The majority of the Court of Appeal held that, as the applicants would be at liberty to print their mark in whatever colour they pleased, and, if printed on a red ground, it would be so similar to that of Messrs. Bass that a purchaser might be misled, the registration ought not to be allowed. The present Master of the Rolls in that case said: "The question of law is whether, in interpreting this Act of Parliament, we are to look at the marks as printed in the advertisement, or whether we are to look at the marks as they will probably be used in the course of trade. It seems to me that it would be a narrow construction of the statute to say that we are only to look at the mark as it is printed in the advertisements, and that the proper construction is to say that we are to look at the trade-mark as it will be used in the course of trade. The proper test is this. Assume both trade-marks to be registered, and let it be supposed that each person registering is ignorant of the other's trade-mark, would any fair use of the second be calculated to deceive?" The other case quoted was "Christiansen's Trade-mark." Mr. Justice Stirling said the mark sought to be registered was to be used in connection with the sale of mustard sold in tin boxes covered with wrappers, commonly of a yellow colour with red letters. These were matters common to the trade, and it was obvious that it would be a fair use of the mark to put it upon a box of that description. In point of fact, that was the use to which it had already been put. Both as a question of eyesight and on the evidence his lordship came to the conclusion that the mark, if registered and used on these boxes, would be "calculated to deceive." He thought, therefore, that registration ought to be refused.

Rival Fly-paper Manufacturers.

In the Chancery Division of the High Court of Justice on Friday, May 9, application was made to Mr. Justice North in the action of Tunbridge *v.* Cormack for an injunction restraining the defendant from passing off his goods as those of the plaintiff. The plaintiff's case was that the defendant, a chemist, carrying on business in one of the principal thoroughfares of Newcastle on-Tyne, was making fly-papers so similar in appearance as to be calculated to deceive purchasers. The plaintiff called his papers "Fly Cemetery Papers"; and the defendant adopted the name "Fly Graveyard Papers." In each case there was the picture of a gentleman flipping away flies, the borders were the same, and the wording almost identical. What the defendant was doing came to the knowledge of the plaintiff by means of a communication from a customer on April 19 last, and he then made inquiries, from which he found that the defendant was employing thirty-one hands in preparation for the coming season.

Mr. Cozens Hardy, Q.C., M.P., appeared in support of the motion.

Mr. Swinfen Eady wanted an opportunity of answering the plaintiff's affidavits, but he had no authority to fix a limit of time within which the evidence should be filed.

Mr. Justice North, looking to all the circumstances, was of opinion that the plaintiff had made out a *primâ facie* case, and granted an injunction restraining the defendant till the trial of the action or further order from colourably imitating the design and get-up of the plaintiff's advertisement bill and fly-papers. He said it would be open to the defendant when he was in possession of his evidence to move to discharge the order.

Alexander *v.* Wolsey.

Mr. Justice North had before him a motion on behalf of the plaintiff in this case to restrain the defendant from carrying on the business of a fishmonger next door to a shop of which the plaintiff is the landlord, and which is occupied by Mr. Cooper, a chemist, in Gloucester Road.

Mr. Cozens Hardy, Q.C., M.P., appeared in support of the motion.

Mr. Napier Higgins opposed it, and mentioned incidentally that a number of expert witnesses would be called for the defence.

It was arranged by consent that the motion should stand over until the trial, the defendant agreeing to accept immediate notice of trial, and the costs of the motion to be costs in the action.

BANKRUPTCY REPORTS.

Percy John Otley, New Street, Burton-on-Trent.

A meeting of the creditors of the above was held on May 3 at the Midland Hotel, Burton-on-Trent, Mr. Hall (Assistant Official Receiver) presiding. According to the report of the Official Receiver, the liabilities are 277*l.* 1*s.* 2*d.*, and the assets 23*l.* 8*s.* 2*d.* The debtor attributes his failure to slackness of trade and insufficient takings. He filed his petition on receiving a writ for 110*l.* 15*s.* from his brother. The debtor commenced business in 1838 with a borrowed capital of 65*l*, and he was not a qualified chemist, being simply a vendor of drugs and patent medicines. The proceedings were purely formal, and the matter remains in the hands of the Official Receiver.

Re Joseph Benjamin Gray, 9 Mincing Lane, E.C, trading as "J. B. Gray & Co.," Merchant and Commission Agent.

In this case the receiving order was made on April 23 last, and the summary of the debtor's statement of affairs has now been issued from the court, together with the Official Receiver's observations thereon. The accounts show gross liabilities 4,549*l.* 7*s.* 7*d*, of which 1,899*l.* 12*s.* 9*d.* are expected to rank, against assets valued at 419*l.* 4*s.* 6*d.*, after allowing for payment of the preferential claims. The Official Receiver reports that the debtor commenced business in 1870 in partnership with another; that such partner retired from the firm in 1881, since which time the debtor has traded alone. The failure is attributed to loss on the trading, caused by the debtor's inability to attend to business properly, in consequence of long-continued illness; to the personal and household expenses, about 400*l.* a year having exceeded profits; to bad debts; and to a claim his liability upon which the debtor disputes. The securities held by creditors are stated to consist of warrants for certain goods, estimated at the amount of the debts; and the bank has also retained a balance of 57*l.* of the debtor's current account, which may be released upon realisation of their security, but which has not been treated as an available asset. Another creditor appears to hold as securities three policies of insurance on the debtor's life. The assets include stock-in-trade, household furniture, shares in the Hull and Barnsley Railway, and book-debts. The creditors meet on May 20, and the public examination of the debtor is appointed for June 5 next.

F. A. Peck, Sea View Street, Cleethorpes, Chemist and Wine and Spirit Merchant.

The public examination of this debtor was taken on May 7 at the Grimsby Bankruptcy Court, before Mr. Regis-

trar Daubney. The debts were stated at 811*l.* 4*s.* 6*d.*, and assets 262*l.* 2*s.* 7*d.* Replying to the Official Receiver, the debtor said he commenced business in 1875 with a capital of 50*l.* or 60*l.*, at Sea View Street. In 1888 he opened another shop in the Market Place, Cleethorpes; and in August, 1889, one in Church Street, Grimsby. At the beginning of 1889 he was owing more money than now. If his health had not failed, he had no doubt he should have worked it off in the summer, as he had done before. He gave his wife 3*l.* a week for household expenses. If all his creditors had come upon him together, he could not have paid them; but he had the stock in his shop. The season before he owed Messrs. Colton & Guy, wine and spirit merchants, 172*l.* 13*s.* 4*d.*, most of which was incurred in 1889. Several other accounts were incurred last year. By Mr. Wigram (for the debtor): The season at Cleethorpes had only been of about eight weeks' duration for the past year or two, and during that time they had to expect to take sufficient to clear off any deficiency which had been left over from the previous year. He had been ill for several months lately, which had increased his expenses very much. The examination was adjourned.

The principal creditors are:—

	£	s.	d.
Allsopp & Sons (Limited), Burton-on-Trent	28	15	10
Bourne, Johnson & Latimer, Furnival Street, E.C.	23	6	1
Colton & Guy, Grimsby	172	13	4
Henderson & Co., druggists, Hull	23	4	10
Hull Banking Company, Grimsby	73	8	5
Lofthouse & Saltmer, druggists, Hull	47	13	1
Tadcaster Brewery Company, York	32	1	6
Trent Brewery, Newark	44	0	0
Watson, H., chemist, Grimsby	20	9	4
Walker, Troke & Co., druggists, 82 City Road, E.C.	42	16	4

Re ELIJAH SELLIN, 246 Commercial Road, Peckham, Chemist and Druggist.

THIS bankrupt attended last Tuesday before Mr. Registrar Linklater, at the London Bankruptcy Court, for public examination. Replying to Mr. Wildy, official receiver, he stated he had traded as a chemist and druggist. He was not a certified chemist, never having obtained a diploma. The only examination he had passed was the Preliminary examination of the Pharmaceutical Society, but he had been accustomed to make up prescriptions for the past twenty years. Owing to the fact that an uncertified chemist could not carry on business in his own name, he had traded in that of his predecessor, Mr. Skinner. Previous to taking over the business he worked for that gentleman for about three months, and agreed to pay 64*l.* for it by weekly instalments of 1*l.* The premises were held on a lease having fourteen years to run, at a yearly rental of 45*l.* The lease was now held by the London and Westminster Loan and Discount Company as security for a loan of 10*l.*, which was only partly repaid. Witness had traded at Commercial Road for three and a half years, during the first half of which he was also employed in the drug department of the Army and Navy Stores. His hours at the stores were from nine till six, and two on Saturdays. He, therefore, could only attend to his own business during the evenings, and in the daytime had to leave it to his wife. It was true she had not sufficient knowledge to prepare prescriptions, but then it was only a poor neighbourhood, and very few were wanted. As a rule the stock was sold in very small quantities. He allowed no poisons to be sold in his absence. In August, 1888, he having then left the stores, he took other premises at 71 Furley Street, and there opened a branch shop. That was about ten minutes' distance from the Commercial Road shop, and was also in a poor neighbourhood. He was compelled to resign his situation at the stores on account of ill-health. The arrangement was that he would be at Commercial Road and his wife would look after the Furley Street shop, acting under his instructions. The Commercial Road business was not making a profit at the time.

Mr. Wildy: And yet you took another shop also in a poor neighbourhood. How could you expect to make them pay?

The Bankrupt: I hoped to get along with the two shops.

Examination continued: The landlord distrained on the Furley Street shop for rent due to the amount of 9*l.* 15*s.* Witness first became aware of his insolvency towards the end of 1888, but continued to trade, in the hope of selling the Commercial Road business as a going concern.

Mr. Wildy: And how much did you expect to get for a business that was making a loss instead of a profit?

The bankrupt replied that, as he gave 64*l.* for it, he thought he might sell it for 75*l.* The claim of his largest creditor was for drugs supplied in the course of the business. The same firm had supplied his predecessor, and made no objection to serving him when the business changed hands. It was true that he had borrowed 25*l.* from a neighbour last November. At that time he was looking forward to selling the Furley Street business, and repaying the loan from the proceeds. Witness had made one previous arrangement with his creditors. That was twelve years ago, and was in connection with a Berlin-wool shop that he put his wife into at Forest Hill. That business was carried on in his name. It was also a failure, and the furniture and effects were sold, and the proceeds distributed among the creditors. He admitted that he gave Mr. Hayward, Coleman Street, a sum of 10*l.* for instituting the present proceedings. Half of that amount was taken from the business, the remainder being lent him by his mother for the purpose. His accounts showed a deficiency of 130*l.*

The examination was ordered to be concluded.

Re WILLIAM LYON, lately carrying on business at 5 Swansea Terrace, Mill Road, Cambridge, Chemist.

THE first meeting of creditors in the above matter was fixed to be held at the office of the Official Receiver, Cambridge, on May 13, but as there was not a quorum present, the proceedings were purely formal. The statement of affairs shows liabilities, 149*l.* 0*s.* 7*d.*; assets, *nil.* The Official Receiver states that the debtor commenced business as a chemist and druggist about fifty years ago with a capital of 800*l.*, and he twice compounded with his creditors; in 1882, with liabilities about 400*l.*, a portion only of his creditors then receiving 5*s.* in the pound, and again in 1884, when 5*s.* in the pound was again accepted, the liabilities at that time being about 50*l.* The debtor's effects, including his stock, is said to be covered by a bill of sale. His insolvency is attributed to "falling off in trade." Debtor states that for the past two years or more his profits have only been about 70*l.* per annum, which have been insufficient to pay trade expenses, much less to provide him with a living. The principal creditors are:—

	l.	*s.*	*d.*
Denom, —, Cambridge	5	1	0
Kidd, O., Cambridge	25	0	0
Lyon, R. N., Ipswich	83	0	0

Gazette.

PARTNERSHIPS DISSOLVED.

Dockrell & Parsloe, New Cross Road, and elsewhere, medical practitioners.

Merry, Thomas, & Son, Fenchurch Street, City, drug-brokers.

Petch, R., & Girling, J., York, physicians.

Tibbits & M'Call, Leicester, dental surgeons.

THE BANKRUPTCY ACT, 1883.

Receiving Orders, Public Examinations, Adjudications, Dividends, &c.

Atkinson, Thomas, Leeds, chemist and dentist. R. O.

Dormer, R., Garston, near Liverpool, analytical chemist. Div. 2*s.*, first and final, Official Receiver, Liverpool, May 12.

Lathbury, T. A., City Road, surgeon. Ex. June 6, at 1.

Lemmens, John Charles, Liverpool, dental surgeon. R. O.

Lochhead, William Kerr, Gringley-on-the-Hill, Notts, physician. R. O.—Adj.

Thompson, L., Thirsk, Yorks, chemist. Div. 3*s.* 4*d.*, first and final, R. Atkey, Thirsk, May 19.

Pharmaceutical Society of Ireland.

THE monthly meeting of the Council was held on May 7, at 11 Harcourt Street, Dublin, at 3 P.M., the President, Mr. Charles Evans, in the chair. The other members of the Council present were the Vice-President (Mr. Wells), Professor Tichborne, and Messrs. Whitla, Merrin, Simpson, Beggs, Hodgson (Treasurer), Hayes, and Dr. Burnes.

The Irish Licence in America.

Letters were read from Mr. James Hartford, M.P.S.I., New York; Messrs. D. O. Haynes and Co, Detroit, proprietors of the *Pharmaceutical Era*; and Mr. F. B. Kilner, New Brunswick, in reply to inquiries which the Council had made through Mr. Hartford as to what States of America recognised the licence of the Pharmaceutical Society of Ireland. Copies were forwarded of the *Pharmaceutical Era* containing information on the subject.

The President said it appeared that the *Pharmaceutical Era* contained replies from twenty-two States on the subject. From five of these the answer as to whether the licence of the Irish Society was recognised or not was "Yes"; from five others "No"; whilst from the remaining twelve the answer was uncertain.

Professor Tichborne: We are under great obligations to these gentlemen.

On the motion of Mr. Beggs, seconded by Mr. Whitla, it was resolved that the best thanks of the Society be given to Mr. J. Hartford, to the proprietors of the *Pharmaceutical Era*, and to Mr. F. B. Kilner for the valuable information contained in their communications.

The Council and the Pharmacopœia.

Letters were read from Mr. Miller, Registrar of the General Medical Council, and from Dr. Quain, the Chairman of the Pharmacopœia Committee, acknowledging the communication which the Council had sent in reference to the Pharmacopœia Addendum. The former was formal, but Dr. Quain, after expressing appreciation of the trouble the Council had taken in bringing together the information which they had sent, pointed out that, by the original communication sent from the Pharmacopœia Committee, different requests were addressed to the "Medical Authorities" and to the "Pharmaceutical Societies" of Great Britain and Ireland.

The President: We fell into a mistake. The circular asked the medical men to say what drugs they approved of, while the pharmaceutical societies were asked for their assistance as to how those drugs should be prepared. We thought it wise that we should also say what drugs were most in use. All that we can do is to wait until we hear what drugs have been chosen by the medical men of the three kingdoms.

Professor Tichborne said he was inclined to take a little further notice of the letters which had been received. It was quite true that the Council had made a mistake in the matter; but the two questions were mixed up in the same paragraph of the original letter of December 3, 1889, which they received from the Chairman of the Pharmacopœia Committee. That letter ran as follows:—

"It is of the utmost importance to obtain accurate information as to which of the comparatively new medicines and compounds possess well-recognised medicinal value, and the Committee are asking the co-operation and assistance of the various medical authorities with the hope of obtaining this information. But as to the manner of preparing or defining the medicines and compounds, the Committee are instructed to invite opinions from the members of the Pharmaceutical Societies of Great Britain and Ireland and of pharmacists generally through the Councils of those Societies or otherwise."

The whole business being wrapped up in one paragraph, it was easy to make the mistake in question; at the same time he thought that the communication which the Council had sent to the Pharmacopœia Committee ought to be of immense value to them; and, with great respect to that Committee, he thought that the Council had done the right thing. The Committee had asked for two things—one was a plebescite, or consensus of opinion, as to what medicines were most in use. They said that they had asked the physicians for that. Then they said that they asked the pharmacists to tell them how to make up those preparations. He was inclined to think that the pharmacist was almost a better judge of the general application and usefulness of medicines than the physician. The opinion of the physician had a sort of local value—it was a reflection of his own practice, whereas they knew that in a great many pharmaceutical establishments in London, Dublin, and Belfast perhaps a couple of hundred prescriptions of different medical men would be made up in each per day, and that would enable them at once to say whether particular medicines were in use by general acclamation or were dying out. Perhaps, for example, if the question were asked whether butyl-chloral was dying out, two or three out of any half-dozen medical men would say that it was a most useful thing, because they prescribed it themselves, whilst the verdict of pharmacists would probably be that it was rapidly becoming an extinct medicine, and that there was no use in retaining it in the Pharmacopœia. He was therefore of opinion that the proper persons to give an answer to the first of the questions in the circular, namely, as to what were established drugs and what were not, would be the two Apothecaries' Halls and the two Pharmaceutical Societies; and he trusted that Dr. Quain might be induced not to let their Addendum go to waste, but to make some use of it—for example, it might be sent to the Pharmaceutical Society and the Apothecaries' Hall on the other side of the water. In America, as well as in England, they were revising the Pharmacopœia, and he found by an American publication, the *Ephemeris of Materia Medica, Pharmacy, and Therapeutics*, that a convention for that purpose was to be held at Washington in May, 1890, and that there were to be summoned to it delegates representing the Incorporated Medical Societies, the Incorporated Medical Colleges, the Incorporated Colleges of Pharmacy, the Incorporated Pharmaceutical Societies, the American Medical Association, and the American Pharmaceutical Association, besides medical officers from the American army and navy—so that in that convention pharmacy would be much more strongly represented than in the Committee of the General Medical Council.

On the motion of Professor Tichborne, seconded by Mr. Merrin, the Registrar was directed to reply to Dr. Quain, stating that the Council regretted the mistake that had occurred, and that they would have much pleasure in rendering any assistance in the direction specified in the communication of the Committee.

Recognising a London School.

Mr. George Brown, M.P.S.I., wrote expressing his surprise that the Council should have recognised the London City School, as it would enable those who could not find a "happy hunting-ground in England" to cross to Ireland, pay their seven guineas, and pass examinations which were already by no means difficult.

The Vice-President said Mr. Brown was a Scotchman who came to Ireland, went in for the Irish examination, and from whom they had accepted a certificate of pharmacy from a Scotch chemist. Now he objected to the acceptance of an Englishman's certificate. Immediately after he passed their examination he passed the Minor in Scotland; and he had told the speaker that he found the Irish examination certainly stiffer than the English one.

The President: He is slightly mistaken in saying that we accepted the school in a great hurry. It was only after very serious consideration and postponement for the purpose of inquiry that we did so.

The Vice-President: At our last final examination there were 11 candidates, and I see only 6 certificates are to be given.

A letter was read from Mr. James E. Brunker, M.P.S.I., 68 Grafton Street, calling the attention of the Council to the fact that there was a resolution on their books with which the resolution passed at their last meeting in reference to the London City School was inconsistent.

The President: The resolution Mr. Brunker refers to was passed about two years ago on the motion of Mr. Allen, seconded by Mr. Beggs, and was to the effect that it was not desirable to recognise private schools of chemistry.

Dr. Burnes: We should reply that we have examined this school and found it suitable for our purposes, but that we will not accept every school.

On the motion of Dr. Burnes, seconded by Mr. Hayes, it was resolved that Mr. Brunker be informed by letter that, after an inspection of the City School by a licentiate of the Society, and after careful consideration by the Council, it had been placed on the list of schools recognised by the Society.

NOT CONCEDED.

Mr. John H. Herley asked if one session of practical chemistry would suffice in his case, as he passed the Preliminary examination in April, 1880. The Registrar was directed to inform him that, having regard to the regulations affecting the chemistry lectures, the Council were unable to grant his request.

THE SOCIETY'S SCHOOL.

A letter dated April 14 was read from Mr. William N. Allen, M.P.S.I., expressing his surprise that the Council had not printed the proceedings of the special meeting held on December 23, 1889. He found by the report of the proceedings of the Council which appeared in the *Pharmaceutical Journal* of April 12 that "it was not thought worth while to have the meeting reported." He thought that the members should have had an opportunity of judging for themselves on that matter, especially if the subject whether the Society was to become a teaching body was discussed. He now asked either that the proceedings of that meeting should be published or that he should be furnished with a copy of the minutes of it.

The VICE-PRESIDENT: I should like to correct an error in the report with respect to myself. I am reported as having said "that it was not thought worth while to have the meeting reported." What I said was that "it was not thought worth while to have the reporter present at the special meeting." At special meetings we do not usually have the reporter. At one of the ordinary Council meetings this matter was referred to a committee, and the committee made a report which was adopted at the special meeting with very little discussion.

Professor TICHBORNE: There was no discussion, and the report was adopted unanimously. The subject had been thoroughly discussed at previous meetings.

The VICE-PRESIDENT: But I think that in the case of special meetings the Registrar should be directed to send notices of them to the journals.

Mr. HODGSON: Would it not be well to have the minutes of the special meeting in question read now?

The PRESIDENT: An imputation is made of secrecy. The establishment of the school, was published in the journals and daily newspapers, and a notice was sent out that a special meeting was called for that very purpose.

The VICE-PRESIDENT: At the two previous Council meetings the matter was discussed, and it was reported in the journals.

The REGISTRAR then read the minutes of the special meeting as follows:—"A special meeting of the Council was held on Monday, December 23, 1889, to receive a report from the committee appointed with reference to the establishment of a night school for practical chemistry, recommending that such a school should be at once established by the Council, at No. 11 Harcourt Street, to be conducted by Professor Tichborne, LL.D., M.P.S.I., assisted by Mr. R. Kelly, M.P.S.I. Present: The President (Mr. C. Evans), the Vice-President (Mr. Wells), Dr. Burnes, Mr. McCormack, Professor Tichborne, Mr. Beggs, Mr. Hayes, and Mr. Merrin. Proposed by Mr. Beggs, seconded by Mr. McCormack, and resolved 'That the report from the committee appointed with reference to the night school be adopted.' Charles Evans, President, February 5, 1890."

Mr. HODGSON: Should we be justified in giving a copy of our minutes to a gentleman who is not a member of the Council?

The VICE-PRESIDENT: I do not think we should do so. The minutes are for members of the Council, but I do not think we should furnish copies of them to licentiates.

Mr. HODGSON: To do so would be to establish a dangerous precedent.

Dr. BURNES said his recollection of what passed at the special meeting was that the resolution was unanimously passed. His impression was that the matter was so urgent that there was no question about it. The night school was an absolute necessity.

Mr. HODGSON said he had a strong feeling against the tendency to do away with night schools. These were of the greatest possible benefit to young men of the class they desired to assist. He knew—and Mr. Hayes could bear him out in this statement—that the evening tuition that used to be given in the College of Science had been a great benefit to those who used to take advantage of it, many of whom had made great progress in the world since. These men never would have been able to acquire chemical knowledge but for the evening instruction that used to be given them by Professor Galloway. But the College of Science evening schools had been closed for a long time. The tendency of the College of Surgeons was to do away with evening instruction. One of the gentlemen connected with that college told them that they did not want persons who could not afford to learn their profession during the day—in other words, they did not want men who had to earn their bread during the day and study for a profession in the evening.

Mr. HAYES: And who are the best men.

Mr. HODGSON said he would do everything he could to put down the tendency to which he referred, and give young men an opportunity of obtaining evening instruction. The young man who earned his bread during the day and devoted three or four hours in the evening to study for the purpose of advancing himself in life deserved the greatest possible assistance.

The PRESIDENT: And, as Dr. Burnes says, we really had no option in the matter.

The VICE-PRESIDENT: I have before me a document of the late President of the Society, Mr. Brunker, dated February, 1885, in which he states that the Council warmly sympathised with the proposal of such a school in connection with the Society, but that they had no funds available for the purpose of starting it; and even if they had they would not be justified in investing them in a more or less speculative project. We are now only following out the wishes of the gentlemen who went before us. The gentleman objects to our having a private school; and an objection is also made to a member of our Council being the teacher of the school. But if we all formed a limited company and established the school in that way there would be more chance of unfairness where we were all interested in passing the candidates than where there is only one gentleman concerned about them with twenty members of the Council against him. I think it a pity that so much opposition should be given to what is a very desirable thing.

Dr. BURNES: No city in the United Kingdom is so badly provided with the means of night teaching as Dublin. In Glasgow, Edinburgh, and all the other great cities there are night schools in full swing.

On the motion of Dr. Burnes, seconded by Mr. Simpson, the Registrar was directed to write to Mr. Allen, stating that his letter had been carefully considered by the Council, and that they hoped he would consider it to be answered by the report of the proceedings of the Council.

Some financial business having been disposed of, the Council adjourned.

THE IRISH PHARMACEUTICAL SOCIETY'S SCHOOL.

WITH reference to the school referred to in the above discussion, Mr. W. N. Allen sends us the subjoined copy of correspondence. The prospectus of the school runs as follows:—

THE PHARMACEUTICAL SOCIETY OF IRELAND.

SCHOOL OF CHEMISTRY AND PRACTICAL PHARMACY.

The practical and theoretical chemistry class is under the direction of Professor Tichborne, LL.D., F.I.C., L.R.C.S.I., assisted by Mr. P. Kelly, M.P.S.I., as demonstrator.

To meet the requirements of pharmaceutical students, this course will comprise 100 hours of actual work at the bench.

The course is to consist of the recognition of the chemical substances of the Pharmacopœia, to describe the processes by which they are obtained; qualitative and quantitative analysis (including the tests of the Pharmacopœia), and volumetric analysis.

For terms and particulars apply to the Registrar, 11 Harcourt Street Dublin, or to the teachers.

A special class for general instruction in pharmacy, materia medica, and botany is conducted by Mr. Kelly.

48 Henry Street, Dublin, January 22, 1890.

Sir Wm. Kaye, C.B., Q.C.

SIR,—I beg to call your attention to the circular herewith enclosed advertising a school of chemistry and practical pharmacy under the auspices of the Pharmaceutical Society of Ireland.

The Council of the Pharmaceutical Society has not submitted to the Lord Lieutenant and Her Majesty's Privy Council in Ireland the resolution under which the school is established, as required by the Pharmacy Act (Ireland), 1875, (section 17). This omission to ask the sanction of the Privy Council to the Pharmaceutical Society becoming a teaching body, in addition to being as hitherto an examining body only, seems to be due to misapprehension of an Order in Council (November 17, 1887, amended March 21, 1888), under which the Council may add such other school as may be approved. Under this order, apparently, the Council of the Pharmaceutical Society appears to consider it has the right to institute a school, as well as the power to recognise it when instituted, but the regulation only gives the power to recognise schools.

A school under the authority of the Council of the Pharmaceutical Society of Ireland, if properly conducted in a suitable laboratory and class-rooms, with teachers unconnected with the Council, would doubtless be an acquisition to the pharmaceutical body; but it is most desirable that such restrictions should be imposed as may be necessary to differentiate the two bodies of the Council of the Society and the teachers. At present no member of the Council is eligible for the office of examiner, but there is no rule forbidding a member of Council to act as a teacher, thus the teacher may give a certificate, and afterwards, as a member of Council, adjudicate upon its correctness.

I have the honour to be, sir,
Your most obedient servant,
WILLIAM N. ALLEN.

Council Office, Dublin Castle, January 31, 1890.

W. N. Allen, Esq.

SIR,—I have to acknowledge the receipt of your letter of the 22nd inst, in which you question the power of the Pharmaceutical Society to institute a school of chemistry and practical pharmacy, and I have to reqnest that you will be so good as to say if the matter has been brought under the notice of the Council of the Society.

I am, sir, your obedient servant,
W. S. B. KAYE.

48 Henry Street, Dublin, February 1, 1890.

A. T. Ferrall, Esq., Registrar Pharmaceutical Society, Ireland.

DEAR SIR,—I have been asked by Sir William Kaye if the subject-matter of the letter copied * over has been brought nnder the notice of the Council of your Society.

I have replied to him that I did on January 20, 1890, verbally inform you of the necessity for obtaining the sanction of the Privy Council to the institution of a school, and also that I have forwarded to you by registered letter the copy-letter above referred to.

I will thank you to lay this matter before yonr Council.

I am, dear sir, truly yours,
WILLIAM N. ALLEN.

43 Henry Street Dublin, February 1, 1890.

Sir W. B. Kaye, K.C.B.

SIR,—I reply to yonrs of the 31st ultimo, I beg to say that I did on January 20, 1890, verbally inform Mr. Ferrall, Registrar of the Pharmaceutical Society of Ireland, of the necessity for obtaining the sanction of the Privy Council to the institution of a school, and I have also forwarded to him this day, by registered letter, a copy of my letter to you, dated January 22, 1890.

I have the hononr, &c, your obedient servant,
WILLIAM N. ALLEN.

Pharmaceutical Society of Ireland, 11 Harcourt Street, Dublin, March 6, 1890.

W. N. Allen, Esq., M.P.S.I.

DEAR SIR,—Having brought your letter of the 1st ultimo before the Council, I am directed to say that my Council do not consider a chance conversation with the Society's Registrar as a communication to them.

I am, dear sir, truly yours,
ARTHUR T. FERRALL, Registrar.

48 Henry Street, Dublin, March 9, 1890.

A. T. Ferrall, Esq., Registrar Pharmaceutical Society, Ireland.

DEAR SIR,—I am in receipt of yours of 6th inst. conveying to me an expression of opinion from your Council, by which I find your Council did not comprehend mine of 1st ultimo.

May I remind you that *if* your Council had passed any regular resolution instituting a school, then, *de ipso facto*, it would have become your duty to have forwarded (under the provision of the Pharmacy Act, Ireland, 1875) the resolution for approval of the Privy Council, and if omitted through any oversight of yours, a verbal intimation would have been amply sufficient. However, the published reports of the meetings of Council, which I take as correct, do not mention such resolution, therefore you could not have forwarded any regulation for approval of the Privy Council, as I am sure, had it existed, you would have done in accordance with the provisions of the Act.

I am, dear sir, yours truly,
WILLIAM N. ALLEN.

Pharmaceutical Society of Ireland, 11 Harcourt Street, Dublin, April 2, 1890.

W. N. Allen, Esq., M.P.S.I.

DEAR SIR,—In reply to your letter of the 9th ultimo, I am to inform you that the Council did pass a resolution at a special meeting in December last to establish an evening class for practical chemistry.

I am, dear sir, truly yours,
ARTHUR T. FERRALL.

48 Henry Street, Dublin, April 14, 1890.

A. T. Ferrall, Esq., Registrar Pharmaceutical Society, Ireland.

DEAR SIR,—I have to acknowledge yours, dated 2nd inst., *re* resolution passed at a special meeting in December last. I must express my surprise that your Council, which I considered specially pledged to have its proceedings published, has not printed the proceedings of that meeting.

A special meeting must have been convened for the consideration of some extraordinary or important matter, yet I find (*vide Pharmaceutical Journal* for April 12, page 841) that "it was not thought worth while to have the meeting reported." As to that, certainly the members should have an opportunity of judging for themselves, more especially if the subject of the Society becoming a teaching body was discussed. I now write to request either the publication of the proceedings of the meeting of December 23, 1889, or that your Council supply me with a copy of the minntes of that meeting, or the resolution passed affecting an evening class, with the names of the proposer and seconder, as there can now be no reason for further suppression.

I am, dear sir, truly yours,
WILLIAM N. ALLEN.

Pharmaceutical Society of Ireland, 11 Harcourt Street, Dublin, May 9, 1890.

W. N. Allen, Esq.

DEAR SIR,—I am directed by the President and Council to inform you that your letter of the 14th ultimo has had their careful consideration, and they hope you will consider it answered by the report of last Wednesday's proceedings.

I am, &c., &c.,
(Signed) ARTHUR T. FERRALL,
Registrar and Clerk to the Council.

A BILL

TO AMEND THE PHARMACY ACT (IRELAND), 1875.

WHEREAS it is expedient for the safety of the public that all chemists or druggists keeping open shop for the sale of poisons should be registered, and that the Pharmacy Act (Ireland), 1875, should be amended:

Be it therefore enacted by the Queen's most excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Par-

* Copy of letter to Pharmaceutical Council of January 22.

liament assembled, and by the authority of the same, as follows:

1. This Act may be cited as the Pharmacy Act (Ireland), 1875, Amendment Act, 1890.

2. This Act shall apply to Ireland only.

3. In this Act—"The principal Act" means the Pharmacy Act (Ireland), 1875. "The Society" means the Pharmaceutical Society of Ireland. "The council" means the council of the Society. "The registrar" means the registrar of the Society. "The treasurer" means the treasurer of the Society. "Poisons" mean all articles deemed to be poisons within the meaning of the Act thirty-three and thirty-four Victoria, chapter twenty-six, intituled "An Act to regulate the sale of poisons in Ireland."

Words importing the masculine gender shall also include the feminine.

4. Section fifteen of the principal Act, and all other provisions of that Act empowering the Pharmaceutical Society of Ireland to create a grade of chemists and druggists legally qualified to dispense medical prescriptions, are hereby repealed.

5. The registrar shall, in the manner by this Act provided, from time to time make out and maintain a complete list to be called "the register of chemists and druggists in Ireland," of all persons by this Act authorised to be registered as chemists and druggists, and the provisions of the principal Act with respect to the registers thereby authorised shall *mutatis mutandis* extend and apply to such register, except so far as such provisions are altered by or are inconsistent with the provisions of this Act. All persons so registered shall be entitled to keep open shop for the sale, retailing, or compounding of poisons: Provided that nothing in this Act shall be deemed to confer on such persons any right to compound medical prescriptions.

6. Every chemist and druggist, or chemist or druggist who has been practising as such in Ireland as a principal on the *first day of January, one thousand eight hundred and eighty-nine*, or who has practised as such as a principal during a period of not less than *five years* at any time previous to the *first day of January, one thousand eight hundred and eighty-nine*, shall be entitled to be registered as a chemist and druggist under this Act on complying with the following provisions:—

(1.) He shall, within a year from the *passing of this Act*, make application in writing to the registrar to be registered under the provisions of this Act.

(2.) Such application shall be accompanied by a statutory declaration of the applicant in the form set out in Schedule A to this Act or to the like effect: Provided that it shall be lawful for the council to require from any such applicant such evidence as they may think fit of the truth of the statements contained in the statutory declaration so made by him, and to require such other confirmatory evidence as they shall think sufficient.

(3.) He shall pay to the treasurer of the Society a fee of *half a guinea*.

7. Every person who shall have gone into business as a chemist and druggist, or chemist or druggist, as a principal, after the *first day of January, one thousand eight hundred and eighty-nine*, and before the *passing of this Act*; or who shall duly have completed a term of service as apprentice or assistant of not less than four years to a person or persons who shall have become a registered chemist and druggist under this Act, or to a pharmaceutical chemist, shall be entitled to be registered as a chemist and druggist under this Act on complying with the following provisions:—

(1.) He shall make application in writing to the registrar to be registered under the provisions of this Act.

(2.) Such application shall be accompanied by a statutory declaration of the applicant in the form set out in Schedule A or B to this Act, or to the like effect, with, in the case of assistants or apprentices, an additional declaration in the form set out in Schedule C, or to the like effect.

(3.) He shall be examined with respect to his knowledge of English orthography and composition, arithmetic, the appearance of the various drugs, and the usual tests for poisons in general use, and shall obtain from the examiners appointed by the council to hold such examination a certificate of having satisfactorily passed the same.

(4.) He shall pay to the treasurer of the Society, on presenting himself for such examination, a fee of *two guineas*, and a further fee of *half a guinea* on being registered.

Provided always that if he shall fail to satisfy the examiner he may present himself for a second examination without further payment.

(5.) A person who shall have duly completed a term of apprenticeship as aforesaid (commenced before the *passing of this Act*) to a person or persons who shall have become or who, had he or they survived, or continued to carry on business would have been entitled to become a registered chemist and druggist under this Act, shall be entitled to make application, and to present himself for examination, and to be registered under this section.

Provided that evidence shall be adduced to the satisfaction of the council that the applicant has completed a term of apprenticeship such as hereinbefore described; and provided also that if the term of apprenticeship be continued after the expiration of one year from the *passing of this Act* it shall not entitle the applicant to present himself for examination unless the term shall have been completed with a registered chemist and druggist under this Act.

(6.) A person who has prior to the *first day of January one thousand eight hundred and eighty-nine*, served as an assistant or apprentice and assistant, for a full period of *seven years* to a chemist and druggist who has registered under this Act, or who, had he survived or continued in business, would have been entitled to register under this Act, shall be entitled to be registered as a chemist and druggist without examination on complying with the other provisions of this section.

8. It shall be the duty of the Society to provide for examinations being held at which applicants for registration as registered chemists and druggists may present themselves for examination. Such examinations shall be held at not greater intervals than the examinations of persons desirous of being registered as pharmaceutical chemists under the principal Act, and shall be held at Dublin and Belfast, and such other places as may be convenient.

Provided that it shall not be compulsory on the Society to cause any such examinations to be held outside Dublin unless at least twelve persons make application for examination thereat.

9. Every person who shall have served an apprenticeship of *four years* with a registered chemist and druggist shall be entitled to present himself for examination under the principal Act and this Act, and shall be entitled, on passing his examination, to be registered as a chemist and druggist under this Act; and every person who shall have served such apprenticeship and who shall have passed the Preliminary examination of the Society, and in addition shall have served an assistantship of *one year* to either a pharmaceutical chemist or a licentiate of the Apothecaries' Hall keeping open shop, shall be entitled to present himself for examination under the principal Act as a pharmaceutical chemist, and shall be entitled on passing his examination to be registered as a pharmaceutical chemist.

10. The provisions of the principal Act with respect to the examinations therein mentioned shall extend and apply to the examinations by this Act authorised, except so far as such provisions are altered by or are inconsistent with the provisions of this Act.

11. Every person who shall be registered under this Act as a chemist and druggist shall be qualified to be elected an associate of the Pharmaceutical Society, subject to any regulations made in pursuance of the principal Act and this Act, and every person so elected and continuing as such associate, being in business as a principal, shall have the privilege of attending all meetings of the said Society and of voting thereat and otherwise taking part in the proceedings of such meetings in the same manner as members of the said Society. Provided always that such associates contribute to the funds of said Society the same fees or subscriptions as members contribute for the time being under the regulations thereof.

12. At the annual election in *October, one thousand eight hundred and ninety-one*, under the principal Act and this Act, the council of the society shall go out of office, and a new council shall be elected consisting of twenty-one members, not less than nine of whom shall be registered chemists and druggists; and the right of voting for members of council at this and all subsequent elections, shall

common to both pharmaceutical chemists and chemists and druggists duly registered. Provided, nevertheless, that the president and vice-president shall remain in office to conduct the election of October, one thousand eight hundred and ninety-one, and declare the votes, but not longer unless duly elected.

13. At all subsequent elections of members of the council, the retiring members shall be one-third of the pharmaceutical chemists, and one-third of the registered chemists and druggists, or chemists or druggists, then on the council, but retiring members shall be eligible for re-election, and should any vacancy by death or other cause occur, the same shall be filled up by a pharmaceutical chemist or chemist and druggist, as the case may be, to replace the person who occupied the vacant place, so that the balance of the Society may be preserved at twelve pharmaceutical chemists and nine chemists and druggists.

14. Every registered chemist and druggist who is in business on his own account, or is acting as manager in charge of any establishment open for the sale of poisons, who is not an elected associate of the Society contributing the prescribed subscription, shall, on or before the *first day of December* in every year, commencing with the year *one thousand eight hundred and ninety-one*, pay to the treasurer a fee of *ten shillings and sixpence*, and unless such fee is paid on or before the date aforesaid, it shall be lawful to erase the name of such person from the register: Provided that on payment of all fees which may be due and of such additional sum, not exceeding *one guinea*, the council shall restore such name.

15. Every pharmaceutical chemist registered as such under the provisions of the principal Act after the passing of this Act who is in business on his own account, or is acting as manager in charge of any establishment open for the sale of poisons and compounding of medical prescriptions, and is not a member of the Society, shall, on or before the *first day of December* in every year pay to the treasurer a fee of *ten shillings and sixpence*, and unless such fee is paid on or before the date aforesaid it shall be lawful to erase the name of such person from the register: Provided that on payment of all fees which may be due and of such additional sum, not exceeding *one guinea*, the council shall restore the name.

16. From and after the *first day of January, one thousand eight hundred and ninety*, it shall be unlawful for any person to assume or use the title of a registered druggist or chemist and druggist in any part of Ireland, unless such person shall be registered as a chemist and druggist under this Act; and notwithstanding the provisions of section thirty-one of the principal Act, no person shall be entitled to sell or keep open shop for selling, retailing, or compounding of poisons by reason that he was a chemist or druggist practising as such in Ireland on his own account at the time of the passing of the principal Act unless he shall be registered as a chemist and druggist under this Act; and any person acting in contravention of this enactment shall for every such offence be liable to pay a penalty not exceeding *five pounds*.

17. In the month of *January* in each year, the registrar shall send printed copies of the register of pharmaceutical chemists and of the register of chemists and druggists to the inspector of weights and measures in each constabulary district in Ireland, and it shall be the duty of such inspector to report to the council any offences against the provisions of the principal Act or this Act or the Act thirty-three and thirty-four Victoria, chapter twenty-six, entitled "An Act to regulate the sale of poisons in Ireland," committed within his district, and *one-third* of every sum of money recovered as a penalty against any person so offending shall be paid to any such inspector who shall be the means of bringing such person to justice.

18. Any person or persons lawfully keeping open shop for selling, retailing, or compounding poisons shall personally manage and conduct such shop and the retailing and compounding of poisons therein, or shall employ for the purposes aforesaid, as an assistant or manager in such shop, a duly registered chemist and druggist; and every person or persons lawfully keeping open shop for selling and retailing poisons, and dispensing and compounding medical prescriptions, shall personally manage and conduct such shop and the retailing, dispensing and compounding of poisons and medical prescriptions therein, or shall employ for the purposes aforesaid as assistant or manager in such shop, a duly qualified pharmaceutical chemist or licentiate apothecary; and any person or persons acting in contravention of this enactment, shall for every such offence be liable to pay a penalty not exceeding *five pounds*.

19. It shall be lawful for the registrar at any time to write a letter addressed to the proprietor or proprietors of any premises where open shop is kept for the selling, retailing, dispensing, or compounding of poisons or medical prescriptions (such letter to be delivered on the premises, or to be forwarded by post as a registered letter according to the post-office regulations for the time being in force), requiring such proprietor or proprietors within seventeen days from the delivery of such letter, to furnish in writing to the registrar a statement of the name and address of the *bonâ-fide* proprietor or proprietors of such shop, and if such proprietor or proprietors do not personally manage and conduct such shop, the name of the duly qualified manager or assistant managing or conducting the same, and the description of his qualification; and in case such proprietor or proprietors neglect to furnish such information to the registrar within the time aforesaid, he or they and each of them shall be liable to pay a penalty not exceeding *one pound* for every day during which such default shall continue, and so long as such default shall continue it shall be unlawful for any person to sell or retail, dispense or compound poisons or medical prescriptions on such premises; and every person or persons acting in contravention of this enactment shall for every such offence be liable to pay a penalty of *five pounds* unless he or they shall prove to the satisfaction of the court or justices having jurisdiction in the case that he or they did not know of such default. Every person who shall make a false statement in writing with intent to mislead in reply to any inquiry addressed to him by the registrar under this Act, shall be held to have made a false declaration, and shall be liable to the penalty provided under section twenty-eight of the principal Act.

20. Section eleven of the principal Act shall be read and have effect as if the words "the second monthly meeting" were substituted for the words "ten days" in that section.

21. All sums payable to the treasurer under this Act shall be applied by him, under the direction of the council, to the purposes of the principal Act and this Act.

22. All penalties recoverable under this Act shall be recoverable and applied in the same manner as penalties recoverable under the principal Act.

[The schedules that follow are merely forms of declarations for persons claiming registration.]

PARLIAMENTARY NEWS.

In the House of Commons on Tuesday night, on the motion for the second reading of the Pharmacy Act (Ireland) 1875 Amendment Bill,

Mr. Sexton asked the Attorney-General for Ireland whether he had any objection to the principle of the Bill, and, if not, whether he intended to afford facilities for its discussion.

The Attorney-General for Ireland, in reply, said he had no objection to the principle, but he objected that a Bill of this nature, on which wide difference of opinion existed amongst those best qualified to form an opinion, should be taken at the end of a sitting, when adequate discussion was impossible.

Dr. Tanner urged the hon. and learned gentleman to ascertain the opinion of those most interested in the Bill, so that when the second reading came on they would have his most valuable assistance. Personally, he did not think there was much opposition to the Bill from the profession in Ireland.

The Attorney-General for Ireland said he had a number of communications under consideration. He should certainly not oppose the Bill when it came on for second reading again, but at present he conceived it to be his duty to oppose it being read a second time without discussion. After it had been fully considered by the House he should withdraw his opposition to the second reading.

The second reading was then put down for Thursday.

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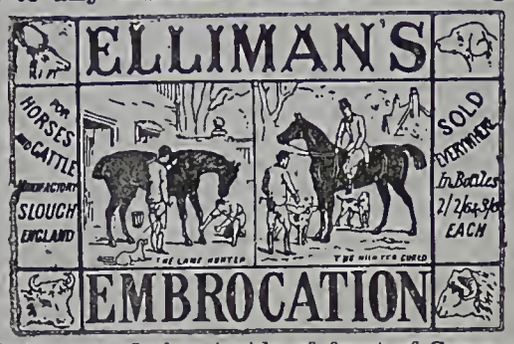

See First Page, facing inside of front of Cover, in the first issue of the month for latest particulars.

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EDITORIAL NOTES.

A SOMEWHAT CRITICAL JUNCTURE.

THAT is how the pharmaceutical conservatives describe the position. "At this somewhat critical juncture" some fifty of them have come forward to give weaker brethren the benefit of their more chastened intelligence. Mr. Coleman and his friends have accomplished this much. They have induced a wholesome state of alarm in the minds of a little group of people who have adopted the pharmaceutical purple as their personal property. "It has hitherto been held to be undesirable" that any of these heaven-scnt rulers should "issue any appeal for support or give public expression to their views with regard to the policy to be pursued in the future"! By whom has such a sensible proceeding been held to be undesirable? Undesirable or not, our great and good ones will have to yield to it sooner or later, or accept the more congenial *rôle* of private pharmacists. Meanwhile this sponsorial manifesto on their behalf is a considerable step in advance. The presidential party, too, may be congratulated on the literary style of their faithful fifty. We cannot honestly say that we regard the argument as perfect, but we are at least not repelled on reading the circular by the assumption of the dictatorial tone of the gentleman who declares that the whole Society was indignant at "the affront put upon our President," nor amused by the irrelevance

of the candidate who occupies nearly half his space in abuse of Mr. Gladstone and of "those self-constituted censors of the Society, the trade newspapers." The circular before us, which, for the sake of readers not members of the Society, we print in full on another page, is serious and pertinent; it bears the signatures of men of position and authority, whose opinions are worthy of respectful attention; and we propose, self constituted censors though we be, to give it the consideration to which, in our view, it is entitled.

With the sentiment of gratitude for past services, and with the desire to have men of influence and ability to govern the affairs of pharmacy, we cordially sympathise; but we do not recognise in these considerations such weight in favour of the fourteen candidates named as to exclude the exercise of fair criticism. Many of these fourteen gentlemen have, it is true, served the Society long and faithfully: but it must be remembered that their election is an honour paid to them: and it is not unreasonable to ask for a rather more general distribution of such rewards as the body corporate has to confer. The question of ability need not much concern us. If all the fourteen advocated had to be dispensed with, the Society has plenty of members yet who could and would carry on its affairs without conspicuous disgrace.

Much more pertinent, it seems to us, is the implied criticism of the policy advocated by the new men which runs through the circular, and which is particularly manifest in the quotation from this journal which the authors have done us the honour to adopt. We entirely maintain what we wrote in that article. And we say further that the programme put forward by some of the new candidates is so crude, wild, and extravagant as to disqualify them for the position they seek. It would be, we believe, a matter for regret if the pharmaceutical voters should endorse at the coming election claims which are unjust and unreasonable, as well as visionary.

So far, we are in accord with the views expressed in what for convenience we may call the "Council" circular. But from its main argument we seriously dissent. We cannot admit the conclusion we are evidently expected to draw from the statement that "the present Council have shown by their past work and in their observations at the Council table that they are heartily in favour of the care of retail trade interests." That they are in favour of those interests we do not doubt, but that they have done as much officially for them as they might and should have done we dispute. The authors of the circular go back to 1841, 1852, and 1868 to establish their case. We admit all this ancient history, which, however, does not affect the immediate controversy. What do they cite which is really appropriate? Surely the poverty of the record is sufficient to condemn them. Two out of their several legislative failures are alluded to. The shelving of Lord Carlingford's Bill was not due to the efforts of the Pharmaceutical Council—indeed that Council was responsible for its most objectionable features; and the only other specific claim for credit is the negative one that, "after having disposed of Lord Carlingford's Bill in 1884, the Council thought it prudent, for some years, not to give the Government an excuse for again introducing the objectionable Bill; they, therefore, refrained from introducing a Bill dealing with trade matters and poisons, and confined their attention to a Curriculum Examination Bill." As an excuse for the masterly inactivity of the past half-dozen years, this is surely too thin to offer to grown-up people.

Our complaint against the Pharmaceutical Council is that they have never shown as much respect for their Pharmacy Act as that measure deserves. No one of them has ever spoken as definitely in support of the interests of qualified chemists and druggists as did Mr. Justice Hawkins in the Pharmaceutical Society *v.* Wheeldon case, nor have they ever, as a body, manifested as much inclination to enforce the provisions of the Act as Mr. Braxton Hicks has done in his capacity of coroner. The spirit of the Pharmacy Act is disgracefully infringed in many parts of the country by companies of unqualified men, formed expressly to evade it. There is no reason to doubt that Parliament would amend the Statute in such a way as to give proper effect to their own intentions if they were asked to do so; but no proposition of the kind has ever been brought by the Pharmaceutical Council before the Legislature. The House of Lords decided that there ought to be a qualified man at the head of every chemist's shop; the Pharmaceutical Council not only took no advantage of this opportunity, but did their best to discourage the measure. The provisions of the Act which remain unaffected by past legal decisions have only been enforced in a half-hearted manner. A more vigorous assertion of them would have occasioned some friction among the members of the Pharmaceutical Society itself, no doubt: but if such a course had been adopted ten years ago the difficulties connected with it would have been overcome before this, and qualified chemists and druggists would have had much more real protection than they now enjoy.

The care of retail trade interests is a vague phrase, but the Pharmaceutical Council will not properly represent its members until it does much more in this direction than it has done of late. To select the methylated spirit proposals of the Government for opposition, and to let the extra duty on pure spirit pass without protest, was a specimen of the absence of system which characterises the policy of the Council in regard to trade matters. In the defence of members of the trade unfairly attacked, in careful scrutiny of the trade-mark lists, and in many other ways there are opportunities for the representative body to assist the trade interests of pharmacists, without compromising its own dignity; and it would be an advantage to the trade and to the Society if there could be in the Council itself a section who would take care that these topics were kept in view. We are not without hope that the result of the pending election will be some approach to a system of party government, which, whatever its defects, has the advantage of ensuring that the two sides of every question shall be fairly discussed. That this has not been the case of late years is generally recognised.

We have no wish to add ourselves to the multitude of counsellors now advising on the forthcoming election. What we recommend to voters is that each should study the controversy from his own point of view, and not be afraid of the indignation to be felt throughout the Society if he should give his vote in a manner contrary to the opinions of authorities who claim the right to direct the consciences of their fellow members as much interested as themselves.

SPIRIT DUTIES AND WINE LICENCES.

In his speech on the second reading of the Government Licensing Bill, Mr. Ritchie is reported to have said that the money to be paid to the county councils to enable them to extinguish licences was to be "raised from drink for the purpose of diminishing the sale of drink"; he further added, "all will acknowledge that, for the purposes of our Bill, money raised from that source is legitimately raised." It is obvious from these quotations that the Government have not considered how unfairly their proposals bear on chemists and druggists. If they simply desire to raise the money from dealers in alcoholic beverages, they ought certainly to find some means of exempting pharmacists from the burden.

The intention is evidently that the extra tax shall fall principally upon those engaged in the sale of alcoholic liquors used for drinking purposes. The value of public-houses remaining will be augmented if a certain proportion of them are closed, and the publicans cannot therefore complain if they have to sacrifice a small fraction of their profits. But it is hard that chemists and druggists, who have no sort of benefit in prospect, should have to bear also a portion of the punishment. We have no means of ascertaining exactly how much the extra sixpence per proof gallon will amount to in average pharmacies, but we have heard it estimated at varying sums from 1*l.* to 10*l.* per annum. It is clear that there are no means of recovering this from the public in the shape of extra profit, and we should expect that if any practicable method could be found whereby chemists might be relieved of the burden which clearly the Government do not desire to lay upon them, this would be favourably considered. It would be, at any rate, advantageous if an official representation of the chemists' case were made to the Chancellor of Exchequer from the Pharmaceutical Council, if only for the purpose of getting the protest on record, so that a claim might be established for possible leniency in some other direction, even though it should be found that no relief can be granted in this matter.

It is also to be noted that in the same speech by Mr. Ritchie to which we have alluded, indication is given of an intention to give to justices absolute discretion in the granting of retailers' Off Licences. At present, as we have often stated, they are required to grant these licences if the formalities of application have been duly complied with, and if there is no reasonable complaint against the character of the applicant. This might offer an opportunity of suggesting to the Chancellor of the Exchequer a modification of the Wine Licences which would enable registered chemists to sell medicated wines only. Possibly a reasonable way of satisfying this demand would be to allow such wines to be sold by chemists under the *ad valorem* medicine-stamp duty, and without a licence. Under such an arrangement the revenue certainly would not suffer. The cost of the stamp would suffice to prevent the introduction of medicated wines to compete with those used as beverages, and the sale of them would be kept in legitimate channels.

Lastly, the attention of the Chancellor of the Exchequer might be directed to the clause in the Customs and Inland Revenue Bill which we mentioned last week, providing that Excise Licences should apply in all cases only to one set of premises. We cannot say that this is an unfair or unreasonable provision; but it is the fact that it will be an extra tax on many chemists, and it is another reason against the imposition on them of an undue share of the public expense.

SCIENTIFIC WORK FOR CHEMISTS.

IV.—Food Stuffs.

The advantages of the Sale of Food and Drugs Act have never been fully appreciated by the public. The spirit of the Act anticipates co-operation between those who have the administration of the Act and the people for whose benefit it is administered. This co-operation should consist chiefly in buyers and consumers of food informing the authorities of any case of adulteration which they may reasonably suspect, and, to ensure that suspicion may not be groundless, many public analysts are empowered to charge nominal fees for analyses made at the instruction of private individuals, yet which may be for the public benefit. This provision has not been taken advantage of to any appreciable extent, so that chemists and druggists who think of taking up this branch of analysis will strike uncultivated ground. Since the days when Charles Kingsley with piquant pen exposed the gross extent to which the adulteration of articles of common consumption was carried, there has been a marked change for the better in our food supplies; but still we cannot blink the fact that there are some articles of food which the public, and even traders themselves, have to take entirely upon trust. There is no article in which that trust is so much misplaced as

COFFEE.

The consumption of this food stuff is decidedly on the decrease in this country, probably because tea becomes a greater favourite than ever: but certainly the bad quality of much of the stuff that is sold for coffee has to do with its waning popularity. Chicory is the most common adulterant, but roasted corn, peas, beans, and roots of various kinds, such as parsnips, have been recognised from time to time, and various Acts of Parliament have been passed relative to them. While adulteration of the true coffee bean has always been prohibited, this has been due to fiscal rather than other considerations. At present the sale of mixtures is permitted under the Sale of Food and Drugs Act, provided they are properly labelled. An unfair advantage is taken of this provision when mixtures containing much more than half their bulk of low-priced chicory are sold at a price which a sound coffee should be bought for. One reason why chicory is added to coffee is that it gives a blacker infusion than coffee itself. This circumstance is a clue to adulteration, for since coffee contains not more than 24 per cent. of extractive matter, and chicory not less than 50 per cent., by exhausting a weighed portion with boiling water, and ascertaining the amount of extractive matter dissolved, we get a clue to the amount of chicory present. A very old test—viz., the specific gravity of the infusion—is fashioned on this basis, but it is not very reliable. A better plan is that suggested by Mr. A. E. Johnson, although it is apt to bring out the coffee too high, owing to the chicory factor being placed at 70. The test may be applied as follows:—Take 400 grains of the ground coffee, and boil it for a quarter of an hour in 13 oz. of distilled water; then strain through gauze. Boil the residue for five minutes longer in 3 oz. of water, strain, and wash the coffee with sufficient hot water to make up to 16 oz. Filter 4 oz. of this, and evaporate to dryness on a water-bath until it ceases to lose weight. Note the weight of the residue, subtract from 70, multiply by 100, and divide by 46; the result is the percentage of coffee in the sample.

By far the most satisfactory method, however, is that devised by Messrs. Paul and Cownley, which is based on the fact that coffee contains a remarkably constant percentage of caffeine, viz., 1·3 per cent. in the roasted beans, while all its adulterants are free from alkaloid. The test is performed with 500 grains of the ground coffee. This should be mixed with 200 grains of moist lime, and dried on a water-bath. Powder the residue, and extract with alcohol in a continuous percolator. The percolate is evaporated to dryness, the residue dissolved in a few drachms of water acidulated with sulphuric acid, and filtered after cooling. This separates fat and waxy matter. The caffeine is then extracted from the filtrate with chloroform, and on the evaporation of the chloroform solution a caffeine residue is obtained which is sufficiently pure for weighing. The following formula gives the percentage of pure coffee in the sample:—

$$\text{Weight of residue} \times 100 \div 6{\cdot}5 = \text{per cent. of coffee.}$$

TEA AND COCOA.

As it passes through the Customs tea is one of the purest food stuffs which is sold to the public. This is owing to the

fact that the Excise authorities very closely watch the imports, and all consignments which are below a certain standard are condemned. Adulteration with hawthorn, rose, elm, and other leaves (common enough in the United States) is practically unknown here. Chinese tea of low quality may contain spent or partially-exhausted leaves; this can be detected by determining the amount of extractive matter which a sample yields, 30 per cent. being taken as the minimum for a pure article. But it deserves to be mentioned that the professional tea-taster's opinion regarding a sample of tea is much more reliable than the chemist's, and for that reason the latter should not attempt to pose as a judge. Cocoa is becoming a more popular food, owing partly to the fact that it is possessed of more staminal properties than tea and coffee, and also because it is free from tannin, and not so liable to adulteration as coffee. Still, few use cocoa as it is imported. The bulk of what is used is of proprietary origin, is generally freed from most of the solid fat, and is more or less "soluble." Our experience is that the popular brands are good value, and the chemist will not find them a fruitful source of analytical fees.

General information regarding the origin, chemical constituents, and analysis of tea, coffee, and cocoa will be found in Dr. Bell's manuals on food stuffs (South Kensington Series, 2*s.* 6*d.* each); Winter Blyth's "Foods" (Griffin, 16*s.*); and Battershall's "Food Adulteration" (Spon).

COMMENTARY.

Pharmaceutical Society *v.* Wheeldon.—Mr. Foster informs us that all the expenses and costs incurred in the appeal in this case have been defrayed out of the money subscribed chiefly through this journal, and that a balance of about 25*l.* remains. He and his co-trustee, Mr. T. Howell Williams, will shortly furnish us with a detailed statement of the affair. Meanwhile Mr. Foster (50 Bishopsgate Street) would be glad to learn the views of subscribers to the fund as to the disposal of the surplus. This is about the cheapest legal decision, considering its importance, we have ever heard of, and Dr. C. R. Taylor, the solicitor for the defence, is entitled to great credit for his efficient and economical conduct of the case. We beg also to move a vote of thanks to The Chemist and Druggist for its successful efforts in ensuring an authoritative interpretation of the knotty point; and if gratitude still exists at Bloomsbury Square, this vote should be seconded by the President of the Pharmaceutical Society at the annual meeting on Wednesday.

The Pharmacy Act (Ireland) Amendment Bill, the text of which we publish this week, is in most respects a reproduction of the Bill agreed upon just a year ago, and published in The Chemist and Druggist for June 1, 1889. It will be remembered that the Council of the Pharmaceutical Society of Ireland refused to ratify the agreement which their president and other members had come to with representatives of the chemists and druggists, and that, consequently, Mr. Brunker and Mr. Draper resigned the presidency and the vice-presidency of the society, and the Bill has been in abeyance since. The necessity for its re-introduction was made apparent to the druggists by the prosecutions at Belfast, which we reported a fortnight since. In the compromise effected between the representatives of the two bodies, it was agreed that those chemists and druggists who had been in business before the passing of the principal Act should retain the title "chemist and druggist"; those who had entered the trade subsequently were to be content with the title of "registered druggist." This was provided for in the Bill of 1889, but in the one now before the House of Commons it is proposed that the title "chemist and druggist" shall be held by all these persons. In the new Bill, too, the chemists and druggists claim the right of occupying nine seats on the Council instead of seven, which was the maximum they formerly agreed to. It will be seen from a letter elsewhere that Mr. Brunker vigorously protests against this modification of the Bill for which he was partly responsible. Mr. Brunker also directs attention to the careless manner in which the new matter has been drafted. It is noteworthy that the Irish Council made no public reference to the measure at their meeting last week.

AFRICAN INSECT WAX.

By J. R. Jackson, Curator of the Museums, Kew.

The production of insect wax in some countries forms an important branch of commerce, notably in China, where upon the branches of *Fraxinus chinensis* and an allied plant, *Ligustrum lucidum*, wax is produced in very great abundance, to such an extent, indeed, as often to completely cover the branches with a thick white incrustation. The insect which causes this deposit is the *Coccus Pe-la*. The wax, which when fresh is almost as white as snow, and is easily scraped from the branches, is cleared of all impurities by melting and straining, and is employed for making candles, which are used at funerals and for festive occasions, such as wedding ceremonies, &c. Here, then, is a well-known commercial commodity amongst the Chinese, the origin of which is partly vegetable and partly animal. Similar substances occur in other countries, which, if more attention were given to them, might perhaps be utilised. Even the dreaded "Australian bug," or, as it is now known, the "fluted-scale insect" (*Icerya Purchasi*), which has become such a pest of late years to many useful plants in New Zealand, California, and South Africa, might perhaps be turned to some profitable account, and the creature would thus cease to be the pest which it is now considered. In some parts of the Cape Colony the orange culture has suffered severely from the attacks of these insects, while a similar misfortune has befallen those in New Zealand and California. But the insect is not at all particular in the choice of plants upon which to make its home, besides which it is extremely prolific, and, added to this, it is said that its abundant waxy excretions protect it from the action of insecticides. That this waxy substance is abundant is readily seen by placing one of the insects on a piece of glass and heating it over a lamp, when nearly the whole of it melts away.

These thoughts of the more general utilisation of wax or fat producing insects are brought to mind from the fact of a peculiar kind of wax having been shown to me by a member of the staff of The Chemist and Druggist, who had recently received it from a friend in South Africa who had found it in Damaraland, where he described it as being used by the natives as a cement for calabashes (water-vessels, &c.). To prepare it, he says, it is exposed to the sun to partially melt or soften, when it is used to fill up cracks—apparently like putty—and as it hardens it forms an almost unbreakable cement. This peculiar substance is the product of an insect, and, though apparently common in Africa, is comparatively unknown out of that country. In the Kew Museums are samples of this wax, both in the natural state and melted and formed into balls; in the former condition it occurs in small irregular pieces, usually about the size of a pea, but sometimes in large agglomerated masses, composed of a number of such pieces. Some, however, are of a lengthened vermicular form, incrusting the spiny twigs of the mimosa upon which it has been formed. Many of these fragments have much the appearance of a caterpillar, and the whole of them are of a dirty white colour.

One sample in the museum at Kew is labelled "Gian," or insect wax, from Natal; while another specimen is said to

be from a species of mimosa, though the wax is by no means confined to this genus of plants, being found on a number of other trees. It is said to be well known all over South Africa, and to be met with in considerable quantities in Natal. It is the staple article used by the Zulu warriors for the making of head-rings, and it takes a very fine polish. It is stated that in passing along a road it is quite a usual sight to meet with two or more ring-men sitting by the side of the road giving each other a friendly touch or polish before entering a town, village, or kraal, much the same as we should employ a shoeblack. A Zulu so employed is shown in the accompanying engraving, which is from a photograph.

As it is stated that any quantity of the wax is procurable in Natal, it would be quite worth the while of some manufacturer to test its capabilities, when we might also hope to discover the insect which causes it.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

French Physicians to Go to Berlin.—After some hesitation, and no little discussion, the French medical body will probably be well represented at the coming Berlin International Congress of Medicine. An address, published by the Medical Press Syndicate, has advised such a participation for the following reasons:—(1) International Medical Congresses were started in 1867 in Paris, and the first meeting was held there. (2) The French language is one of the three tongues officially accepted, and is likely to be used by many besides natives. (3) It is the duty of the French medical body to take a part in the discussions, to expose the scientific progress made here, and be heard on any resolutions that may come up before the Congress.

Country Pharmacists Obtain Satisfaction.—For some time country pharmacists have been complaining that in towns provided with preparatory schools of pharmacy they were systematically kept out of the juries instituted by law for the preliminary examination of candidates to matriculation. The two pharmacists of the first class in actual practice who should sit on the board, have been too often purposely ignored and replaced by school professors. The Minister of Public Instruction having been appealed to, has issued a general order to university rectors, reminding them that they should see to a better observance of the law. Two pharmacists of the first class, practising either in the town or its hospitals, must be members of the board, whenever practicable. It is only when there are none in the place that school professors holding the requisite degree may be substituted.

After Advertising Quacks.—The Seine Medical Society Council have adopted the following amendment to the Bill proposed by the Havre medical syndicate: "Whoever shall, without being duly qualified, advertise either in the papers or by bills that he will treat certain diseases, shall be deemed guilty of illegal practice of medicine." But they have declined to accept the subjoined aggravation imagined by the syndicate. "Should the delinquent be either an officier de santé, a pharmacist, dentist, or midwife, the sentence may impose, in addition to the usual penalties, a temporary suspension from trade or practice." The last clause was considered too Draconian, but the first seems to stand but little better chance to be considered by Parliament. The real remedy would be some distinct legislation like the English Indecent Advertisements Act. As these peculiar complaints are almost the only ones selected by advertising quacks, some law of the sort, modified to suit national ideas and customs, would just meet the case.

Another Veterinary Bill.—Some time since a Bill was introduced in the Chamber of Deputies by the Minister of Agriculture, whereby, among other provisions, all veterinary practitioners not graduates of a school would be required to submit themselves to an examination before a board including, besides other experts, two qualified veterinary surgeons. This clause being objectionable to many interested persons, Deputies Dugué de la Fauconnerie, Baron Mackau, and Comte de Lévis-Mirepoix (all largely interested in agriculture) have presented a new Bill on the subject, and explained their reasons for opposing the Ministerial measure. They argue that it would be unjust to men who for years have been practising and paying a licence, to be forced to an immediate examination; inconvenient to farmers to lose all of a sudden the services of twelve or fifteen thousand expert farriers, and have to depend on the three thousand, or so, graduated surgeons; and, lastly, unadvisable to have on the examining board men who, like veterinarians, look upon expert farriers as rivals and competitors. They agree with the necessity of requiring proofs of competency from would be practitioners, and they propose a Bill providing that (1) In one year none but graduates of veterinary schools and qualified expert farriers shall practise veterinary medicine. The castration of animals not belonging to the horse, ass and bovine species not to be considered a part of veterinary practice. (2) Expert farriers to pass an examination before a board composed of a member of the general council, a professor of agriculture, two agriculturists, and a pharmacist. (4) Foreign veterinary graduates to be by the Minister admitted to practice, provided their diploma be considered to offer sufficient guarantees of ability, and provided reciprocity has been granted by either the graduating college's Government, or the graduate's native country. (6) Veterinarians to keep no open shop, but may dispense medicines needed for the animals treated by themselves. The Bill, it will be noticed, has some singular features, especially those relating to foreign diplomas and to castration. The clause substituting a pharmacist for two veterinarians, will meet with the approval of all. It will insure, not only ability, but also impartiality. The Bill has been referred to the Committee on veterinary medicine.

Trade Notes.

Messrs. Benjamin and Wallace C. Nickels, analytical chemists, have removed from Holborn to 41 Cheapside, E.C.

Mr. J. P. Phillips, chemist of Bagshot, has purchased the business until recently carried on by Mr. T. G. Cresswell, of Addlestone, Surrey.

Mr. J. G. Agar, chemist, Mansfield, Notts, has entered into partnership with Mr. T. W. Agar, and in future the business will be carried on under the title of Agar Bros.

Messrs. George Stewart & Co., manufacturers of sealing-wax at Edinburgh, have removed their London warehouse and office from Dyer's Buildings, Holborn, to 57 Farringdon Street.

Referring to the scarcity of strychnine, noted in our trade report, Messrs. Fletcher, Fletcher & Stevenson write that they are still prepared to offer one or two thousand ounces for prompt delivery. They add that they have sold more than 10,000 oz. within the past four months.

Indiarubber Goods were advanced in price by 10 per cent. on May 12. The manufacturers have been compelled to make this addition owing to the enhanced cost and increasing difficulty of obtaining the raw material. We understand that a meeting of the manufacturers is to be held on an early day to consider the matter further.

There is 1 atom of sulphur to 75 of carbon in egg albumin, 1 to 146 in globulin, and 1 to 350 in hæmoglobin.

COUNCIL CANDIDATES.

The following circular has been distributed during the past week:—

Election of Council, May, 1890, of the Pharmaceutical Society of Great Britain.

Dear Sir,—The attempt made last year by the officers of a body having no connection with or interest in the Pharmaceutical Society to influence the Election of Members of Council has induced us to remind you that in a few days you will be called upon to select Fourteen Members to serve on the Council for the ensuing year.

An additional reason for our venturing to address you arises from the fact that a postcard has been sent to some of the electors, on which it is stated that certain eight gentlemen are in favour of a policy which has for its object the "*care*" *of Retail Trade Interests.*

It has hitherto been held to be undesirable for Members of the Council who stand for re-election to issue any appeal for support, or to give public expression to their views with regard to the policy to be pursued in the future. The idea which has dominated the zealous workers in the cause of Pharmaceutical progress has been that each elector would bring his knowledge and intelligence to bear on the election, and choose, as the executive body to carry on the Society's multifarious business, the men who seemed best calculated to fill that responsible position, either by reason of the work they had already done, or by the influence they were in a position to exert for the welfare of the Society.

This being the practice, it occurs to us that it would be sorry treatment for past services of no ordinary kind to allow the retiring Members of the present Council, including their zealous President, to be left to the tender mercies of adverse—and in some cases not very scrupulous—criticism; and we therefore desire to bring before you our view of the state of affairs Pharmaceutical as affecting Retail trade interests.

One of the objects of the Society set forth in the Charter is the protection of the interests of Chemists and Druggists. Now, what was the danger which threatened the Chemist and Druggist at the time, and for some time previous to the foundation of the Society? The answer is: Danger from *without* their own body—viz, an attempt by the Apothecaries of that day to deprive the Chemists and Druggists of important rights and privileges.

The Society, when founded, were successful in their object of *defence*, and proceeded on their career ready at all times to resist any attempts on the part of the medical profession or others to interefere with the business of the Chemist and Druggist.

Omitting, for the sake of brevity, all reference to the powers afterwards fought for and obtained by successive Councils of the Society, culminating in the Pharmacy Acts of 1852 and 1868, let us contrast the state of things existing when the Charter containing the words "protection of those who carry on the business of Chemist and Druggist" was obtained, and the condition of the trade interests of the Chemist and Druggist *at the present time.* The difference is this, that, whereas in 1841 Parliament was about to be asked to give powers to the Apothecaries' Company to take away *our* privileges, now *we* have to ask *Parliament* to assist us in retaining what remains, and in rescuing much that has been filched away from us. It follows, therefore, that the "care" of Retail Trade Interests can only mean at the present time strenuous effort to obtain some further legislative concessions.

During the past seven or eight years vigorous attempts have been made by the Council to obtain these concessions. In 1883 a Bill was drafted by which *inter alia* it was proposed that the Sale of Poisonous Patent Medicines and the Compounding of Medical Prescriptions should be limited to registered persons. It also dealt with the subject of Trading Companies and Stores. This Bill was forwarded to the Government, and after correspondence and numerous interviews, the Privy Council declined to introduce the Bill, and expressed their opinion that they could not support the Bill if brought in by a private member of Parliament. Moreover, they notified that in their judgment the Council of the Society ought to confine their legislative efforts to the subjects of education and examination, leaving special trade matters to be dealt with in a measure brought in on the responsibility of the *Government.*

The Government of the day acted on this notification, and Lord Carlingford, Lord President of the Council, introduced into the House of Lords a Bill to amend the Pharmacy Acts, by which it was proposed to deprive the Council of the powers vested in them to add poisons to the Schedules. The provisions were so impracticable and interfered so much in the details of a Chemist and Druggist's business, that the Council, acting in the spirit of the words of the Charter as to the protection of the interests of Chemists and Druggists, took prompt action, and owing to that action in less than three weeks the Bill was shelved. The President of the Society has stated from time to time that the Privy Council have a Bill ready to introduce of an analogous character, and any attempts at legislation must therefore be made with the consciousness that the Government may think fit to modify in a way unpalatable to the Chemist and Druggist any Bill introduced into Parliament by any future Council, or may introduce a Government Bill containing objectionable provisions side by side with one introduced by the Society.

After having disposed of Lord Carlingford's Bill in 1884, the Council thought it prudent for some years not to give the Government an excuse for again introducing the objectionable Bill; they therefore refrained from introducing a Bill dealing with trade matters and poisons, and confined their attention to a Curriculum and Examination Bill.

During the present year the Council drafted a Bill, by which it was proposed, amongst other provisions, that Associates in Business should become Members, and be eligible for election to the Council, and that the Compounding of Medical Prescriptions should be limited to registered persons. This Bill contemplated the consolidation of the Society, and the opening of the doors of membership to all present and future Chemists and Druggists as well as Pharmaceutical Chemists, and was intended to benefit the whole of the retail trade in regard to dispensing. A certain number of members of the trade, however, set to work to oppose it in Parliament, because it did not go far enough in the direction they desired, and the Bill was not proceeded with, the members of Parliament to whom the charge of the Bill was to have been entrusted expressing the opinion that it was necessary for all persons interested to be generally agreed before any legislation affecting one class of the community could be obtained.

The present Council, numbering among them no less than *three past Presidents of the late Trade Association*, have shown, by their past work and in their observations at the Council table, that they are heartily in favour of the care of Retail trade interests; and their policy of trying to obtain further privileges, whenever possible, is one which surely has much to commend it, seeing that neither the Government nor Parliament are disposed to interfere with what is called "Freedom of Trade," and that they are jealous of increasing the powers of Corporate Bodies.

The difficulties the Council have to contend with, and which must be overcome to obtain further legislation, may be fittingly illustrated by the following extract from an article published March 15, 1890, in the *Chemist and Druggist.* The article is headed—

THE LEGITIMATE DEMANDS OF CHEMISTS.

In his letter this week Mr. Coleman indicates the ultimate object of his agitation. It is to obtain "at no distant date" an Act to restrict the dispensing, compounding, and vending of all medicines to the qualified chemist; and in order to obtain this object, or rather to get the necessary motive-power to work for it, he would alter the conditions of entrance into the Pharmaceutical Society so as to bring into that organisation the great majority of the registered chemists of the country. On these schemes we are obliged to part company with Mr. Coleman. Something like them may be realisable in the far future, but if they are put forward as practicable objects to work for now, we say that this is a proposition to waste more time and money on absolutely visionary projects. The idea of getting the whole trade to work as one man underlies everybody's plan, and if anything is established by experience, it is that nothing of the kind can be looked for. Moreover, apart from the fact that the outsiders will not come in, there is the other difficulty, that the insiders will not have them, and a very little opposition on the part of these to an invasion of their acquired rights would suffice to prevent any alteration of the Society's conditions by Parliament. But even assuming that all chemists

could be got to unite in the suggested demand, does Mr. Coleman, or anyone else, know of any two members of Parliament who would back their claim to be the exclusive vendors of medicines when this proposal should be definitely stated in the form of a Bill? What we want from the Council is that they should get a great deal more out of their present Act; that they should enforce it vigorously, even against their own members, when necessary; that they should get it mended where it is defective, and enlarged where this is possible. These things could be done by a vigilant and well-informed Council without rushing into the opposite extreme of putting forward impracticable schemes which take no sufficient account of the forces which would oppose them.

The observations we have laid before you and the foregoing extract seem to us to indicate that both for working the existing Acts and for obtaining further powers it would be detrimental to the interests of all concerned to materially change the present members of Council. We therefore, at this somewhat critical juncture, consider it desirable to make a selection from the candidates before us, and we ask you, both in your own interest and in that of the trade itself, to vote for—

Abraham, Alfred Clay	Harrison, John
Atkins, Samuel Ralph	Hills, Walter
Carteighe, Michael	Hopkin, William King
Gostling, Thomas Preston	Leigh, Marshall
Greenish, Thomas	Martin, Nicholas Henry
Grose, Nicholas Male	Richardson, John George F.
Hampson, Robert	Schacht, George Frederick

Mr. Hopkin, one of the new candidates, has taken an active interest in the welfare of the Society and the trade for many years; and Mr. Grose, of Swansea, is well known to the members of the Pharmaceutical Conference—he showed, as Local Secretary of the Conference at its meeting at Swansea, a capacity for organisation, and a zeal for the best interests of Pharmacy, which would be of great service to the Society.

We, the undersigned, venture to urge that the electors should vote for *all* the above-named retiring Councillors, together with

MR. GROSE AND MR. HOPKIN.

These, with the seven members remaining in by rotation, one of whom is resident in Scotland, would, in our opinion, form a Council fully representing the Pharmaceutical and trade interests of the electors in the different parts of the country.

Adams, C. M., Southport	Hughes, J. Swansea
Adams, W., Shrewsbury	Jefferson, T., Royston
Arkinstall, W., South Kensington	Lloyd, J. W., Swansea
Barnes, J. B., Knightsbridge	Mathews, H., Bayswater
Bateman, T. H., South Hampstead	Millhouse, H. H., London
Bell, C. B., Hull	Morrison, C. O., Sheffield
Benger, F. B., Manchester	Orchard, E. J., Salisbury
Brightmore, W., Maida Vale	Phillips, J., Wigan
Bollock, J. L., London	Pullin, W. H., Leamington
Burdeo, E. M., London	Randall, W. B., Southampton
Churchill, W. J., Birmingham	Rheeder, T., Newcastle-on-Tyne
Cooper, A., South Kensington	Riddle, W. R., Hexham
Davidson, P., Brondesbury	Robinson, R. A., Brompton
Dunn, J., Newcastle-on-Tyne	Roper, R. F., Plymouth
Dyson, W. B., South Kensington	Savage, W. D., Brighton
Eardley, J. F., Sheffield	Shacklock, J. H., Streatham
Ellinor, G., Sheffield	Shepheard, T., Chester
Ellwood, T. A., London	Symons, N. H., Penzance
Farr, E. H., Uckfield	Watts, R., Sheffield
Foggan, G., Bedlington	Wokes, T. S., Liverpool
Fox, A. R., Sheffield	Wood, R., Windsor
Hallaway, J., Carlisle	Woolley, G. S., Manchester
Hambrook, J. B., Dover	Young, R. F., New Barnet

SPIRIT OF NITROUS ETHER.—Mr. George J. Harvey, in a thesis presented to the Californian College of Pharmacy, recommends the preparation of this spirit by distilling a mixture of sodium nitrite, water, alcohol, and sulphuric acid. Mr. Harvey thinks that the process has never been used before. He is wrong, of course. It was official in the British Pharmacopœia, 1864, and it is the method employed by Dunstan and Dymond for making pure ethyl nitrite, only they deprecate the use of heat.

Notes of Novelties.

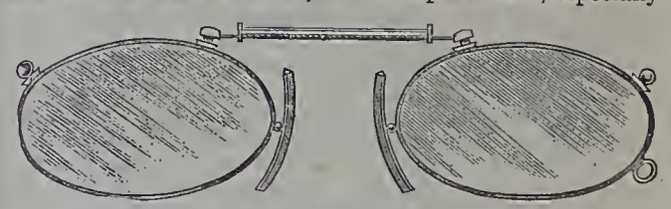
WALLICH'S INHALER.

THIS is a useful earthenware inhaler manufactured by Messrs. Burroughs, Wellcome & Co. It is fitted with a flexible inhaling-tube, and the naso-oral attachment (designed by Dr. Macnaughton Jones), which is shown in the figure, enables the patient to inspire and exhale without

removing his face. We may explain that the handle of the inhaler is hollow, and it is through it that the air enters into the jug, so that the handle is always lower in temperature than the body of the inhaler, and there is no fear of holding it when the jug is filled with water at 150° F.

NEW ASTIGMATIC FOLDERS.

MESSRS F. DARTON & CO., of 45 St. John Street, West Smithfield, have introduced a novelty into certain of their folders which marks an important improvement, especially

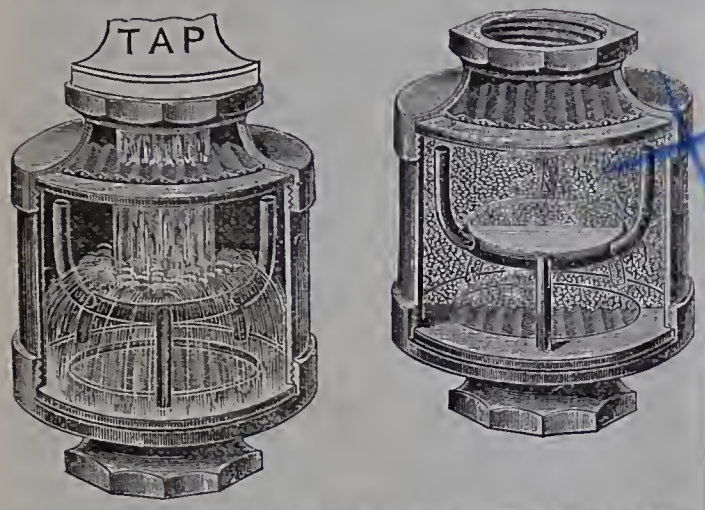


when these are used by astigmatic patients. This consists in the introduction of a spiral spring into the bridge of the folders, the effect of which is that whether the folders are worn close to the eyes or at some distance off, the lenses are always adjusted to the same angle. The advantage of this invariable adjustment when cylindrical lenses are used will be obvious to all oculists.

GEM WATER FILTER.

THE subjoined illustrations are of sections of the filter offered to the trade through Messrs. T. Dixon & Son, Swine-

gate, Leeds. The filter is a small, handsome, nickel-plated cylinder, which is connected with the water tap by means of a suitable attachment supplied by the makers, or screwing



on to taps which have a thread outside. The filter is filled with a specially prepared ground quartz, and there is a distributing disc situated in the centre, whereby the water as it passes through is driven in various directions, and filtration becomes highly efficient. It is also reversible, that is, daily it can be turned upside down, the first flow of water washing out the previous day's collection of solid material, which the filter has kept back. We have found the filter to do its work very well, with little trouble, and it is always ready to give a supply of clear filtered water, while the fact that it is reversible gives it merit which we seldom find in tap filters.

Personalities.

A PORTRAIT of "Michael Carteighe, Esq., President of the Pharmaceutical Society," is exhibited in the Royal Academy this year.

WE hear that Mr. Gwilym Evans, as vice-chairman of the Carmarthen County Council, has invited the Council, its police, and others to luncheon upon the occasion of their holding the first meeting in Llanelly.

THE old-established business of H. R. Kemp, chemist and druggist, 220 Holloway Road, N., has been converted into a limited liability company, and will be conducted as Kemp & Co. (Limited), under the management of Mr. John Cross.

IN our notice of the late M. Genevoix last week, two inaccuracies occurred which his friend M. Ferrand asks us to correct. In the first place, M. Genevoix did not advocate in the Pharmaceutical Society of the Seine the free exercise of pharmacy by unqualified persons; it was the free exercise by qualified persons that he sought for. Secondly, it was not correct to say that the Pharmacie Centrale acquired the Menier chocolate business; they acquired the drug business which was carried on by M. Menier, the great chocolate-manufacturer.

MR. SIDNEY S. PRIDMORE, a popular Birmingham prestidigitator, is a qualified chemist and druggist, and the son of a chemist at Hinckley. A few years ago he was a student at the South London School of Pharmacy, and his performances there rivalled in popularity those of the regular professors. Mr. Pridmore is now a regular professor of the art of legerdemain, and has performed before the Prince of Wales. He is particularly competent with cards. Once he was travelling in a railway-carriage with a friend and a party of strangers. The latter proposed a little game, which the friend joined in, and had soon dropped 3*l.* 10*s.* Mr. Pridmore had been watching the performance, and had easily seen the true inwardness of it. He offered to take a hand at higher stakes. The strangers readily assented, but their new pigeon proved too much for them. The friend's 3*l.* 10*s.* was pulled back, and an extra 8*s.* 6*d.*, with which, as the journey came to an end, Mr. Pridmore promised to drink the health of his new acquaintances. He is a very good friend to the Midland Counties Chemists' Association, and always attends their social meetings and contributes to the entertainment when his other engagements will permit.

MR. S. M. BURROUGHS, the head of the well-known firm of Burroughs, Wellcome & Co., has just taken the first step (says the *Star*) for becoming a naturalised British subject. Mr. Burroughs is an American by birth, but he has now lived so long in this country, is so completely identified with its interests, and takes so deep a concern in its social welfare, that his adoption of its nationality is not to be wondered at. Mr. Burroughs is one of the keenest and most successful men of business in London. He started some years ago in a comparatively small way as a manufacturing chemist. His first step was to send round to every chemist in London a small, neatly-made, and pretty little box—as dainty, indeed, as a lady's workbox—which contained an assortment of drugs done up in that tabloid form which has now become so popular. It is hard to know how much money was spent in this preliminary advertisement, but, whatever it was, it has amply repaid Mr. Burroughs. He has recently, as is known, built a splendid factory at Dartford, and the shop of the firm in Snow Hill is one of the most artistic, as well as one of the most commodious, in London. Mr. Burroughs is an advanced Radical, an intimate personal friend and a strong disciple of Henry George, and he carries out his ideas in his business, for most of his employés have a share in the profits of the firm.

Obituary.

CHAPMAN.—On May 11, at Crescent Road, Ipswich, Mr. Wm. Chapman, chemical-manure manufacturer, aged 65. Mr. Chapman commenced business as a chemist, with his brother, Mr. H. Chapman, and in 1859 began to manufacture artificial manures, opening a manufactory at Bramford, of which he took the active management up to the time of his death.

SMITH.—On May 8, at 5 Royal Crescent, Edinburgh, Mrs Eliza L. Smith, widow of Peter S. Smith, manufacturing chemist, Duke Street. Aged 37.

VEITCH.—On May 7, at Southside Villa, Duns, N.B., James Veitch, pharmaceutical chemist.

WOOLLEY.—On May 3, at 2 Millgate, Stockport, Mr. Daniel Woolley, pharmaceutical chemist, aged 69. Mr. Woolley was a native of Campstall, Cheshire, and served first under Messrs. T. & J. Leigh, and afterwards with Messrs. Sims & Shaw, chemists, Stockport. Subsequently he entered business for himself, and rose to a high position among the tradesmen of the town. He was appointed an alderman in 1883.

GLUE can be bleached by adding oxalic acid and oxide of zinc, in the proportion of 1 per cent. of the glue. The latter should first be made into a pulp with water and heat, and the chemicals added while the mass is hot. The same process may be used for bleaching blood albumen, but the degree of heat should not be above 122° F., or the albumen will coagulate.

THE METRIC SYSTEM has not been a success in the United States. It was hoped that medical men would adopt it, but a collective report by the National Institute of Pharmacy obtained from one hundred and ten different pharmacies, comprising over one hundred towns, distributed among thirty States, indicates a great falling-off. Arkansas, Dakota, Delaware, Florida, Indiana, Louisiana, Kansas, Maine, Missouri, Oregon, South Carolina, Tennessee, Texas, Washington, do not show a single metric prescription. Thirteen towns show an average of 1 in 1,000; six average 2 in 1,000: nine from 2 to 10 in 1,000; ten range from 10 to 30 in 1,000; two average 80 in 1,000; one town each in New Jersey and Wisconsin 145 in 1,000; in New York City 350 in 1,000; and in Lacrosse, Wis., 396 in 1,000.

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., May 15.

ACIDS.—*Citric:* Dull at 1*s.* 3¼*d.* per lb., perhaps a shade below that price might be accepted by second-hand holders. *Tartaric:* A dull market, English, on the spot, 1*s.* 3*d.* to 1*s.* 3¼*d.* per lb.; Foreign, 1*s.* 2¼*d.* per lb. to 1*s.* 2½*d.* per lb.

ALOES.—Of *Cape* aloes, only about 38 cases were offered at to-day's auctions and partly disposed of at fairly steady rates, good hard bright at 24*s.* per cwt. to 24*s.* 6*d.* per cwt., seconds and dull lots at 23*s.* per cwt. down to 19*s.* 6*d.* per cwt. *Curaçaos* still remain very cheap, especially the lower qualities. Some very good red liver aloes sold at 72*s.* 6*d.* per cwt., medium brown liver at 37*s.* 6*d.* per cwt. to 40*s.* per cwt., ordinary to very common, from 22*s* per cwt. down to 6*s.* per cwt. In New York, the stocks in importers' hands are said to be exhausted. Of *Socotrine* aloes, fair but soft yellow sold without reserve at 77*s.* 6*d.* per cwt.; for another parcel £0*s.* per cwt. is required. Thirty cases ordinary *Zanzibar* aloes, dark, in skins, sold also without reserve, at 39*s.* per cwt. to 40*s.* per cwt.

AMBERGRIS.—Fine parcels remain firmly held at high prices. For 7½ oz., fair colour and good flavour, a bid of 150*s.* per oz. was refused. One tin, though offered "without reserve," found no buyers even at 10*s.* per oz., and was therefore bought in.

ANISE.—Chinese *Star-anise* remains scarce and dear. Mail reports from China, dated April 9, state that the season is practically closed and no further supplies of the drug are expected. For a parcel of 20 bags *Russian* anise offered in sale to-day a bid of 17*s.* 6*d.* was refused, and the price was said to be 18*s.*, but other holders ask 18*s.* 6*d.* to 19*s.* for fair average quality. A parcel of fair clean *Spanish* anise is held for 31*s*, and 7 bags *Italian* sold "without reserve" at 25*s.* 6*d.* per cwt.

ARSENIC.—Firm at 14*s.* 6*d.* per cwt. for best white powder.

BALSAMS.—Advices from America speak of a slight reduction in the price of *Canada* balsam, which is now offering at from 1*s.* 2½*d.* to 1*s.* 4½*d.* per lb. c.i.f., according to quality. It is said that a good trade is being done at these reduced rates. *Copaiba* is arriving freely in New York, and the market there is reported weaker for Maracaibo and Carthagena varieties; but Maranham balsam is scarce and in small supply at 2*s.* 6*d.* c.i.f. *Peruvian* balsam is about 3*d.* per lb. dearer, and several cases were sold at 4*s.* 3*d.* per lb. to-day—one tin bringing 4*s.* 6*d.* per lb., while for sediment 3*s.* 3*d.* to 3*s.* 5*d.* was paid. The New York market is also reported better, with a small stock. *Tolu* is also dearer, 1*s.* 5*d.* is asked here for good quality, and from New York the price comes at 1*s.* 4*d.* to 1*s.* 4½*d.* per lb. c.i.f. The consumption in the States is said to have become large owing to the rise in chewing gum.

BUCHU.—Our stock is now thought to be very small, and with a strong demand prices are steadily advancing. At auction to-day, 3 bales fair green *round* leaves sold at 4½*d.* per lb., and we doubt whether there is anything more to be had at that price. Good *long* leaves sold at 6¼*d.*; and 2 bales spurious long leaves, without flavour, at 5*d.* per lb.

CALABAR BEANS.—Prices in Liverpool are still on the decline, 7½*d.* per lb. having been accepted a few days ago. That quotation is still given as the nearest value.

CALUMBA.—There is a very good competition for this article, and prices are higher, although the fancy price paid for one lot at the last auctions was not reached. Thirty-eight bags sold at 24*s.* 6*d.* for sound yellow mixed medium to bold; and 15*s.* for a rather brown and dusty lot. For another parcel of fair quality 21*s.* was refused.

CAMPHOR (CRUDE).—The market drags along very slowly and we do not hear any reliable reports of business for delivery. The general quotation for May-June shipment remains 125*s.* c.i.f., but we hear that it is not possible to obtain orders at 120*s.* c.i.f. Business is said to have been done at 135*s.* per cwt. for spot stuff, London terms, and it is added that attempts to purchase a further parcel at 130*s.* were unsuccessful. At to-day's auctions 101 tubs Japan camphor ex *Pembrokeshire* were offered, and a bid of 132*s.* 6*d.* was reported to have been refused for one or two lots.

CAMPHOR (REFINED).—On Wednesday the English refiners again lowered their quotation from 2*s.* 2*d.* to 1*s.* 11*d.* per lb. for *Bells.* Orders on German refined are being solicited at 1*s.* 6½*d.* to 1*s.* 7*d.* per lb.

CARDAMOMS.—The moderate supply of 175 packages was offered to-day, and of this quantity 80 packages sold at firm prices for the lower grades, and an advance of 1*d.* to 3*d.* per lb. for good qualities. *Malabar*: Good round pale medium size, 2*s.*; small, 1*s.* 11*d.*; and very small, 1*s.* 3*d.*; medium to bold, slightly brownish, 1*s.* 10*d.* to 1*s.* 11*d.*; small size, 1*s.* 4*d.*; and very small at 10*d.*; small to medium yellow and stalky, 1*s.* 3*d.*; long ditto, 1*s.* 1*d.*; small pale long, 1*s.*; partly split and brown, 11*d.* *Mangalore*: Medium to small, slightly brownish, bought in at 2*s.* *Aleppy*: Long medium size brownish sold at 1*s.* 6*d.*; dark mixed and split at 11*s.* *Mysore*: Fine bold heavy bright, 3*s.* 4*d.*; medium to small size, 2*s.*; and small, 1*s.* 6*d.*; yellow medium to bold, 1*s.* 6*d.* to 2*s.*; long pale medium to bold, 1*s.* 9*d.* to 1*s.* 10*d.*; small to medium yellow, 1*s.* 7*d.*; small size, 1*s.* 4*d.*; round small to medium yellow, 1*s.* 4*d.* to 1*s.* 5*d.*; long pale, 1*s.* to 1*s.* 1*d.*; small split and specky, 10*d.* down to 8*d.*; common seed brought 1*s.* 2*d.*; fair to good quality, 1*s.* 4*d.* to 1*s.* 6*d.* The shipments of cardamoms from Ceylon to all parts, during the periods between January 1 and April 17, have been:—1889–90, 133,320 lbs.; 1888–9, 108,523 lbs.; 1887–8, 111,984 lbs.

CASCARA SAGRADA.—The American market appears to be collapsing still further, and, as the collectors in the Western States are now offering to make contracts at low prices for delivery, New York holders are anxious to realise. It is thought that offers for fair quality at 40*s.* c.i.f. terms would not be refused. At to-day's auctions 600 lbs. of old woody winter bark were offered without reserve, but nobody agreed to buy it, and the best offer made was 3*s.* 6*d.* per cwt.

CINCHONA.—In South American barks the following transactions took place to-day. Of 51 serons *Loxa*, 40 sold, fair rather broken quill, 1*s.* 2*d.* to 1*s.* 6*d.*; more broken, 6*d.* to 7½*d.*; ordinary thin and dull, 5*d.* to 5½*d.*; root, 3*d.* per lb. Ninety-two bales *Carthagena*, newly imported from Guayaquil, were all sold with good competition; medium to fine bold bright, 7*d.* to 8*d.*; fair to small size, 5*d.* to 5½*d.* Of *Guayaquil* bark a large quantity was offered, but only a few lots sold at 7*d.* to 1*s.* per lb. for fair to good brown quill. Flat *Calisaya* in large supply; about 20 bales good stout orange, partly damaged, sold at 1*s.* 5*d.* to 1*s.* 6*d.*; ordinary soft bought in at 9*d.* The auctions next Tuesday are likely to be moderate in extent, up to this day a total of 1,777 packages is declared for sale. It consists of 845 bales Ceylon, 546 East Indian, and 386 South American cultivated Calisaya. Our imports from all quarters since our last report have been 568 packages. The shipments from Ceylon in the periods between October 1 and May 3 have been: in 1889–90, 5,100,000 lbs.; 1888–89, 7,050,000 lbs.; 1887–88, 6,693,475 lbs. 1886–87, 8,813,458 lbs.; 1885–86, 9,055,039 lbs. The arrivals by rail from the growing districts in Colombo have been: October 1, 1889, to May 3, 1890, about 1,350 tons; same period, season 1888–89, 2,390 tons.

COCAINE.—We hear of lower prices, and it is said that sales have been made as low as 13*s.* 6*d.* per oz.

COCA LEAVES.—New light green *Truxillo* leaves are offering cheaply from New York, at 8½*d.* per lb. c.i.f. terms, which is said to be below the cost of production.

COCCULUS INDICUS.—Forty bags new *Cochin* sold to-day at from 12*s.* to 13*s.* 3*d.* per cwt., which is an advance on the last auction rates, but lower than the prices recently paid by private contract, which were 13*s.* 6*d.* to 14*s.*

COLOCYNTH.—Turkey apple in fair supply; the price ranges from 1*s.* 2*d.* to 1*s.* 6*d.* per lb., according to quality.

COPPER (SULPHATE).—The spot market continues strong at 25*l.* to 25*l.* 10*s.* for delivery; quotations are also better. July–August, 22*l.*; September–December, after having sold at 19*l.* 5*s.*, is now held at 20*l.* There has been a good demand for export to the continent.

COWHAGE.—16 tins were offered to-day, the price asked for fair quality, rather mixed with stones, is 7*d.* to 8*d.* per oz. For one lot an offer of 3*d.* was refused.

CREAM OF TARTAR.—Quiet and dull; best French *Crystals* are quiet at 101*s*, but might be obtained, perhaps, a shade under that figure.

CUBEBS.—24*l.* 10*s.* is still asked for fair quality. At to-day's auction 30 bags were offered and bought in at from 20*l.* upwards to 23*l.*, the latter for genuine, but very small shrivelled and stalky quality.

CUMIN SEED.—The price for good bright Malta is still 24*s.* 6*d.* and small sales took place at that rate at to-day's auctions.

CUSCUS ROOT.—One bale of fair bright quality sold to-day at the high price of 29*s.*

DAMIANA LEAVES are offering at unprecedentedly low quotations; 6*d.* to 6½*d.* per lb., c.i.f., for good green quality.

DRAGON'S BLOOD.—Seven cases were offered to-day, but they comprised nothing of fine quality. Fingers in reed, of dull colour, are held at 5*l.* to 5*l.* 5*s.*; and a lot of fair-coloured lump sold at 6*l.* 5*s.* per cwt.

ERGOT OF RYE.—The market is quiet, and 1*s.* 3½*d.* per lb. would buy *Spanish* ergot, sound but rather mixed with seed. Two bags bold but wormy Spanish sold to-day at 1*s.* 2*d.* per lb. "without reserve."

GALLS.—In *China* and *Japan* galls there is very little trade at present; the nominal spot quotation for the former variety is 70*s.* per cwt. *Turkey* galls fairly steady, with sales of blue at 57*s.* 6*d.* to 58*s.*, and white at 45*s.* to 47*s.* 6*d.* per cwt. About 60 bags, more or less damaged, sold to-day at 53*s.* down to 14*s.* per cwt.

GAMBOGE.—Fifteen cases offered to-day met with very good competition at full prices. For selected gamboge 14*l.* is now wanted, whereas lately the price was 13*l.* Good pipe, partly blocky but bright fracture is held for 12*l* Ordinary ricey lump and damp broken pipe sold well at 9*l.* 7*s.* 6*d.* to 9*l.* 12*s.* 6*d.* per cwt.

GENTIAN ROOT.—The stocks of last year's gentian are being greatly reduced all round, and until the end of next month fresh root will certainly not be available.

GINGER.—Of the *Cochin* variety about 630 packages new crop, and 1,100 old crop were offered; these found a good demand, and cut ginger was again dearer, fine qualities as much as 5*s.*, but lower grades could be bought occasionally at cheaper prices; rough sold at 22*s.* to 30*s.*; dull washed at 23*s.* 6*d.* to 24*s.*; small to bold scraped 28*s.* to 53*s.* 6*d.*; small to good bold cut 32*s.* 6*d.* to 71*s.* *Jamaica ginger*: Again much dearer and in strong demand, the advance ranging from 5*s.* to 8*s.* per cwt. Low to good medium at 81*s.* 6*d.* to 93*s.*, good to fine bold 96*s.* 6*d.* to 111*s.*

GLYCERINE.—The convention price of 70*l.* for German double-distilled s.g. 1·260 still holds good, but second-hand holders are rather weaker.

GUARANA.—One box of good quality was bought in to-day at 8*s.* per lb.

GUM AMMONIACUM.—Fine qualities are very scarce and would bring high prices if offered. At auction to-day five cases dull dark and dusty sorts were offered and bought in at 35*s.* per cwt. nominally.

GUM ARABIC.—Of *Turkey* gum several lots were offered to-day and all bought in, the prices asked being 12*l.* for fair but dusty sorts, and 10*l.* for small yellow grain. One case good clean small grain sold at 12*l.* 2*s.* 6*d.* "without reserve." A case of fine pale but dusty *Cape* gum was bought in at 10*l.* per cwt. *Senegal* rather dearer, Bas-du fleuve 87*s.* 6*d.* Galam not available at present. *Mogadore* gums in good supply at from 5*l.* 5*s* for ordinary red mixed sorts to 12*l.* and even 14*l.* for selected. Of East Indian gums fine *Aden* is said to be scarce. The following is the present range of prices for the principal varieties of East Indian gums: *Aden* sorts, ordinary dark mixed and dusty to fine pale picked, 27*s.* 6*d.* to 100*s.*; fair to good scented Bombay sorts, 25*s.* to 40. *Ghatti*: good to fine pale picked, 40*s.* to 85*s.*; ordinary to low and dark, 35*s.* down to 18*s.* *Amrad*: good to fine soft pale ambery Kurrachee drop, 45*s.* to 75*s.*; ordinary red and brown mixed, 42*s.* 6*d.* down to 18*s.* per cwt. *West African* and *Brazilian* gums continue to find a steady sale at full prices in Liverpool.

GUM GUAIACUM.—Lower in price. At to-day's sales a parcel of 24 boxes was shown, of which 20 sold at 1*s.* 8*d.* to 1*s.* 9*d.* for good bright clean block, and 1*s.* 4*d.* to 1*s.* 5*d.* for loose drop mixed with wood.

GUM KINO.—Two cases fair quality from Cochin sold to-day at 35*s.* per cwt., an advance of 7*s.* on the last auction rates.

GUM BENZOIN.—Two cases *Siam* gum, offered without reserve, sold at good prices, bright blocky almonds of little flavour 12*l.* 2*s.* 6*d.* to 13*l.* 12*s.* 6*d.* per cwt. Of *Sumatra* gum only 19 cases were sold, good bold almondy seconds, of old fracture, false packed corners, 7*l.* 17*s.* 6*d.*; fair almondy ditto, rather brown borders, 7*l.* 10*s.* to 7*l.* 12*s.* 6*d.*; dull seconds, rather false packed, 6*l.* 7*s.* 6*d.* Several good bright lots were catalogued, but they were all bought in; 15 small boxes good pale orange were bought in at 65*s.* per cwt. A parcel of 30 2-cwt. blocks of spurious benzoin, imported from Bombay, was bought in at 30*s.* per cwt. It consisted of wood and earth into which "almonds" of French chalk had been deftly introduced.

GUM MASTIC.—Fair yellow to pale drop is quoted at 2*s.* 5*d.* to 2*s.* 6*d.* per lb.

GUM MYRRH dull of sale. Fine selected bought in at 7*l.* to-day, and coarse siftings at 80*s.*; for 8 bags very dark and common bdellium mixed 36*s.* to 40*s.* was paid, and pickings sold for 37*s.* 6*d.* per cwt.

HONEY.—For a parcel of 17 cases good pale candied *Californian* 40*s.* was refused to-day. *Chilian* is in over supply and rather at a discount at present. For Jamaica honey the demand remains pretty good, but prices are slightly easier, 35*s.* to 36*s.* for good liquid orange, and 30*s.* to 31*s.* for rather dirty liquid brown.

INDIARUBBER.—The prices of *African* and *Pará* rubber have been advancing rapidly lately, and the market is very strong. Medium grades are particularly scarce, and fine Pará rubber is selling daily at 3*s.* 9*d.* per lb., though the transactions at this high figure are naturally limited in extent. It is reported that 2 tons of fine old Pará changed hands yesterday at 3*s.* 9½*d.* per lb.

IPECACUANHA.—At the auctions to-day the large quantity of 102 packages was offered, which was considerably in excess of the requirements. With a good deal of trouble about 45 bales sold at an irregular reduction, the first parcel being 4*d* to 5*d.* lower, but afterwards the decline ranged from 8*d.* to 10*d.* per lb. Sound root, partly wiry to good stout, realised from 6*s.* 7*d.* to 7*s.* 3*d.*, and damages from 6*s.* 6*d.* to 7*s.* 3*d.* per lb.

JALAP.—Fifteen bales were offered to-day, but no sales were made, one parcel of fair heavy sound quality, rather small, being at first knocked down at 1*s.* 3*d.* per lb., subject to approval, but we understand that the owner refused to accept the bid. The bulk was bought in at 1*s.* 6*d.* to 2*s.* From New York the report comes that the new crop is arriving from Mexico, about 90 bales having thus far been imported there, of which two-thirds were still to be had; the nominal quotation was 1*s.* 2*d.* c.i.f. terms.

JUNIPER BERRIES.—From Italy a very neglected market is reported, and it is said that an unusually heavy stock has accumulated in second hands. At to-day's drug sales 70 bags sold "without reserve" at 9*s.* 6*d.* per cwt.

KAMALA.—For 4 cases of fair bright quality 9½*d.* would now be accepted, but even at that slight reduction there are no buyers.

MERCURIALS.—In consequence of the advance in quicksilver, the prices have again been raised 1*d.* per lb. all round, *Calomel* being now 3*s.* 9*d.* per lb., and the other preparations in proportion.

MUSK.—A fair quantity of Tonquin pods was offered to-day, there being 14 caddies of first pile, of which 6 were sold. For medium to bold blue skin, fairly-well trimmed dry, 83*s.* 6*d.* was refused. It is said that privately 85*s.* has been bid a couple of days ago. First pile fairly trimmed, with under-skin and thin top-skin, sold at 55*s.* to 58*s.* 6*d.* per oz., which is almost equivalent to the last sale rates. Of 10 caddies third pile 5 found buyers; thin blue skin, but very damp, at 57*s.* 6*d.* to 58*s.*; ordinary dry and very skinny at 23*s.* 6*d.*; trimmings sold at 1*s.* 6*d.* per ounce.

MUSK-SEED.—Only one case of good *West Indian* was shown, and met with an offer of 4½*d.* per lb., which was refused.

NUX VOMICA.—The arrivals still continue, among them being a parcel of 1,000 bags from Aleppy. At auction 95 bags small rather pale mixed, from Ceylon, sold at 11*s.* 6*d.*; and 191 bags from Calcutta, small iron grey, at 8*s.* 3*d.* to 9*s.* 3*d.* per cwt. for the sound.

OIL (CASTOR).—*Calcutta* oil is very firmly held in Liverpool, and higher prices have been paid for good seconds, viz., 3¾*d.* per lb. on the spot. There is but little left available at that price. The London quotations are 4*d.* to 4½*d.* for first, and 3¾ per lb. for second Calcutta; for clean pale *Cocanada* 3⅝*d.* per lb. is also wanted.

OILS (ESSENTIAL).—There is very little of any importance to report from this market, and prices generally remain unchanged. For *Citronella* oil, in bottles, ⅞*d.* per oz. is asked. The exports of citronella (and lemongrass) oils from Ceylon are less this season than last, the figures for the periods between January 1 and April 17 being: 1889–90, 2,134,864 oz.; 1888–9, 3,767,392 oz.; 1887–8, 1,832,050 oz. Twenty cases *Gingergrass* oil, of a strong turpentine flavour, were offered to-day and bought in at 1½*d.* per oz. For 4 bottles very cloudy and inferior *Rose* oil from Bombay, 1⅛*d.* to 1¾*d.* per oz. was paid. As regard American oils, the stock of H.G.H. *Peppermint* in New York is said to be the smallest for fifteen years. *Sassafras* oil is offering cheaply at 1*s.* 8*d.* to 1*s.* 9*d.* per lb. c.i.f., and oil of *Wintergreen* has also fallen again to 7*s.* 6*d.* per lb., which is believed to be the lowest quotation on record.

OILS (VARIOUS).—*Cocoanut oil*: Ceylon fairly steady at 25*s.* 3*d.* to 25*s.* 6*d.* for pipes, and 25*s.* 9*d* to 26*s.* for hogsheads on the spot. The present shipment is offering at 25*s.* c.i.f. terms. Cochin oil may be had on the spot at 28*s.* 3*d.* to 29*s.*, and c.i.f. at 29*s.* for shipment. Mauritius oil remains at 26*s.* *Cotton-seed oil* dearer since last week, and closing steady; raw at 20*s.* 3*d.* to 20*s.* 4½*d.*, and ordinary refined at 22*s.* 6*d.* The Hull prices, without packing, are 18*s.* 6*d.* to 18*s.* 7½*d.* for raw, and 20*s.* 7½*d.* to 29*s.* for refined oil. *Linseed oil*: The market has declined, and is still weak, 23*s.* 7½*d.* being the nearest spot quotation. Hull 6*d.* lower, viz., 23*s.* 6*d.*, packing extra. *Olive oil*: The fine eating oils unchanged; cargo oils dearer; Mogadore, 34*s.* 6*d.* to 35*s.*; and Spanish held for 40*s.* *Palm oil* firmly held at 25*s.* 6*d.* to 25*s.* 9*d.* for fine Lagos. *Petroleum* steady at 5 9/16*d.* to 5⅝*d.*; 31*s.* for brown. *Turpentine* dearer, 29*s.* to 29*s.* 3*d.* *Rape oil* firm at 32*s.* 6*d.* for refined, and 31*s.* for brown.

OPIUM.—Alarming reports have been received here during the last two or three days from the producing countries, and to-day a telegram from Constantinople was read at the drug sales advising an advance of 10 per cent. Yesterday Smyrna cabled a rise of 1*s.* per lb. all round owing to reports of the total destruction of the spring sowings; but it must not be forgotten that such reports are circulated every season. So far as the London market is concerned there has been a fair demand for *Druggists'* opium at 12*s.* 6*d.* to 13*s.* for best and 11*s.* 6*d.* to 12*s.* for second grades. In soft shipping opium there is no change; *Tokat* sells up to 13*s.* 6*d.*; for fine *Malatia* 14*s.* 6*d.* is asked, but no business is reported. A fair trade is doing in *Persian* opium at unaltered prices—viz., from 13*s.* up to 13*s.* 9*d.* per lb.

ORRIS ROOT.—The new crop in Italy is now shortly due, and it is generally said that the prospects are favourable. The owners of available parcels of fine *Florentine* root, however, are not disposed to make any concessions. *Verona* root, the inferior grade, is wanting in the Italian market. At the drug sales to-day 35*s.* was named as the price for 22 packages bold but very dark *Italian*, and for dull *Mogadore* of new import 25*s.* is asked.

QUASSIA WOOD.—Dearer. Old logs have sold up to 7*l.* 10*s.*, and chips at 15*l.* At to-day's sales 9 tons newly-imported logs sold at 6*l.* 2*s.* 6*d.* Another parcel of smaller quality is offering at 6*l.* 5*s.* Our stock is large.

QUICKSILVER has advanced. The principal importers sold a large quantity yesterday at 10*l.*, then 1,500 bottles at 10*l.* 2*s.* 6*d.*, and subsequently named 10*l.* 5*s.* as the price, but to day they refuse to mention any quotation; second-hand holders have sold up to 10*l.* 2*s.* 6*d.* to-day. We have received 1,050 bottles from Italy this week.

QUININE.—Exceedingly dull of sale. We should make 1*s.* 1½*d.* the nearest spot quotation, and 1*s.* 1¾*d.* forward.

RHUBARB.—Of 121 cases offered to-day 61 sold at full prices, the best lots bringing several pence above valuation. *Shensi*: round medium to bold fine, good coat and fracture 3*s.* 6*d.*, smaller 2*s.* 2*d.*, small fair to good druggists' root 1*s.* 11*d.* to 2*s.* 2*d.*, medium to bold flat fair coat and fracture 1*s.* 11*d.* to 2*s.* 4*d.*, pickings 10½*d.* to 1*s.*, *high dried* bold fair coat and fracture, slightly wormy, 1*s.* 3*d.* to 1*s.* 4*d.*, smaller size 1*s.* 2*d.* *Canton*: loose texture, pinky grey fracture, specky coat round, 1*s.* 6*d.*, flat 1*s.* 5*d.*

SANTONIN.—Messrs. Böhringer & Sons say:—This article has during the last few weeks been shuttlecocked in the most unreasonable fashion without any apparent justification whatever; the price was first suddenly reduced from 5*s.* 9*d.* to 4*s.* 3*d.* per lb., while certain manufacturers, by way of warning off all purchasers, at the same time spoke of the probability of a further reduction. This was followed, however, shortly afterwards by an announcement that the sale was suspended. Such unceremonious treatment of the market is calculated to still further discredit an article that is already somewhat out of favour.

SARSAPARILLA.—In large supply and selling fairly well, with a good demand. Grey *Jamaica*, sound, 1*s.* 4*d.*; damaged, 1*s.* 3*d.* to 1*s.* 4½*d.*; *Lima Jamaica*, 7½*d.* to 10*d.*

SENNA.—Of 67 packages *Alexandria* a few lots sold very cheaply at about 2*d.* reduction; 6½*d.* to 8*d.* for fair small leaf; good bright bold leaf is held at 1*s.* 6½*d.* *Pods*, at 1*s.* 3*d.* to 1*s.* 4*d.* per lb. Of 348 bales *Tinnevelly* 255 sold, mostly common quality, at a slight reduction; common false packed, and black to small dark and yellow mixed, ¾*d.* to 1¾*d.*; fair small to medium yellow, 2¼*d.* to 2½*d.*

SHELLAC.—The market last week closed with an animated feeling and a large business in *Orange* lac, for June and July delivery, at higher rates. On Monday further large transactions took place at a fresh advance, partly on the spot and partly for May-August delivery. At the auctions on Tuesday the following assortment was included in the catalogues:—

	Cases		Cases	
Orange lac	231	of which	20	were sold
Garnet „	42	„	2	„
Button „	65	„	65	„
Total	391		87	

Holders were exceedingly firm, and showed no disposition to accept anything less than the highest quotations of the private market, hence the small amount of business done. *Orange* lac, unworked second, brought 94*s.* to 98*s.* for fine pale, and 83*s.* for good reddish; *Garnet* AC, worked, 78*s.*; and good bright unworked first *Button*, 97*s.* to 98*s.* per cwt. Since the auctions the market has been lower, and at to-day's call the following prices were made:—

	May	June	July	Aug.	Sept.
Orange TN, sellers	82/6	300 at	83/6	84/	84/
„ buyers	81/	81/6	81/6	—	—

Garnet AC, nominal quotations.

SPERMACETI.—Thirty-six boxes *American* were offered to-day, and bought in at 1*s.* 5*d.* to 1*s.* 8*d.* per lb. There

were no bids. In America the price remains high, but the movement is said to be entirely speculative, and the refiners are expected soon to bring considerable quantities upon the market.

TAMARINDS.—Good new crop *Barbados* continues to sell at 19*s.* 6*d.* per cwt.

TEA.—The *China* market remains quiet, though there is a slightly firmer tendency for common teas, and Clearing-house quotations are a point or two higher. Common Newmakes are in plentiful supply, selling from 5½*d.* to 7½*d.* per lb., and the first of the new seasons will now very soon be here to supply the deficiency of finer grades of Newmake. *Indians* and *Ceylons* both show a very firm market this week, and all lower grades are steady to a fraction dearer. The tea market has opened at Hankow, but only a very few transactions have passed, and those not for the London market. The course of China tea next season will be interesting, and it is impossible to forecast the effect upon importers of the last few disastrous seasons. Several of the large operators will not be represented on the Foochow market when it opens. Messrs. Thorne have announced their intention to import no tea after this season, and the rise in silver will check the importation of commoner grades, added to which the Chinamen themselves lost large sums on the Souchong and Panyongs which they imported on their own account this season, so that it is not improbable that we may see the supply of China tea for a time short of the demand, and a very different range of prices for common Congou to those we have been accustomed to of late.

TURMERIC still advancing. It is doubtful whether good *Madras* finger could be bought in any quantity below 16*s.* 6*d.* per cwt.; while for good *Bengal* 12*s.* 9*d.* to 13*s.* per cwt. is wanted.

WAX (BEES') continues in strong demand, and high prices are paid for all varieties. *Jamaica* sold up to 7*l.* 10*s.* for a very fine pale lot, good orange to yellow 6*l.* 10*s.* to 6*l.* 17*s.* 6*d.*, greyish mixed 6*l.* 5*s.* *Mogadore* of good orange colour was bought in at 6*l.* to 6*l.* 10*s.* Of *East Indian* wax 6 cases fair pale bleached from Bombay are held at 7*l.* 10*s.* per cwt. *Australian* good yellow 5*l.* 17*s.* 6*d.* to 6*l.*, greyish 5*l.* 10*s.* Of *Madagascar* 375 pockets sold at 5*l.* 7*s.* 6*d.* to 5*l.* 10*s.* for fine bright and 5*l.* to 5*l.* 2*s.* 6*d.* for good brown.

CHEMICALS IN THE NORTH OF ENGLAND.

PRICES OF HEAVY CHEMICALS, with the exception of caustic soda, keep fairly steady, but transactions are mostly for present consumption, buyers not being willing to pay the higher prices for forward deliveries asked by makers.

THE WALLSEND CHEMICAL COMPANY, Wallsend-on-Tyne, are again in the market with soda ash, soda crystals and white alkali. About three years ago they laid their revolvers off and sold their make of sulphate of soda to the Jarrow Chemical Company, at the Tyne Dock Alkali Works.

BICARBONATE OF SODA has slightly improved and prices are a little better. 5*l.* 15*s.* to 5*s.* 17*s.* 6*d.* per ton, in 1-cwt. kegs for prompt shipment, f.o.b. Liverpool.

BLEACHING-POWDER has varied in price, reaching 5*l.* 5*s.* per ton on rails, but prices have eased down a little, and 5*l.* to 5*l.* 2*s.* 6*d.* per ton in softwood casks is now quoted f.o.r. Widnes or St. Helens. For shipment f.o.b. Liverpool in hardwood casks, 5*l.* 10*s.* to 5*l.* 12*s.* 6*d.* per ton is asked. Tyne market for this article continues firm at 5*l.* to 5*l.* 2*s.* 6*d.* per ton in softwood casks, f.o.r. or f.o.b.; Glasgow rates 5*l.* 2*s.* 6*d.* to 5*l.* 5*s.* per ton f.o.r.; ex ship Thames 5*l.* 10*s.* to 5*l.* 12*s.* 6*d.* per ton, with usual extras of 20*s.* per ton for 1-cwt. kegs, 15*s.* per ton for 1½-cwt. kegs, and 5*s.* per ton for 3-cwt casks.

CAUSTIC SODA continues very depressed. Prices keep dropping day by day, although there is a fair enquiry. *White*, 70-per-cent can be bought at 8*l.* 2*s.* 6*d.* to 8*l.* 7*s.* 6*d.* per ton according to brand, 60-per-cent at 7*l.* 5*s.* to 7*l.* 7*s.* 6*d.*, per ton, 74-per-cent. at 9*l.* per ton for prompt shipment, all f.o.b. Liverpool, with usual discount of 3½ per cent. Newcastle 77-per-cent. in sympathy with the Lancashire market is also lower by 10*s.* per ton. Present price for solid in drums is 9*l.* 10*s.* per ton, and ground in 3 to 4-cwt. barrels 13*l.* per ton f.o.r. or f.o.b. Tyne, prompt shipment and net cash. *Cream caustic* in little demand at 7*l.* to 7*l.* 2*s.* 6*d.* on rails, and 7*l.* 5*s.* per ton f.o.b. Liverpool.

CHLORATE OF POTASH quiet. Some transactions at 4⅝*d.* per lb., but generally quoted at 4½*d.* to 4⅝*d.* at Liverpool Glasgow and Newcastle.

SODA ASH quiet, and prices are a shade easier. *Carbonated*, 1½*d.* per degree; and *Caustic*, 1⅜*d.* to 1½*d.* per degree f.o.b. Liverpool. Packed in strong export barrels, 3 cwt. to 4-cwt. each price is 1¾*d.* per degree f.o.b. Liverpool. Tyne brands also lower, and quoted 1¼*d.* per degree, less 4 per cent. to 5 per cent. for 48 to 52 per cent. carbonated.

SODA CRYSTALS are in good demand, and prices well maintained. With the approach of warmer weather the output will become lighter; and with a continuance of the present demand prices may be expected to hold their ground. Present prices are 2*l.* 17*s.* 6*d.* per ton on rails, and 3*l.* 2*s.* 6*d.* per ton packed in 3-cwt. barrels, net weight f.o.b. Liverpool; 2*l.* 11*s.* 6*d.* per ton in casks, gross weight, 2*l.* 14*s.* per ton in 1-cwt. bags, net weight, and 2*l.* 11*s.* 6*d.* per ton in 2-cwt. bags, net weight, f.o.b. Tyne; and 2*l.* 18*s.* per ton in casks, gross weight, ex ship Thames.

THE GERMAN MARKETS.

HAMBURG, May 13.

IN nearly all the branches of trade at our port the lack of business enterprise continues, and so long as strikes and labour disturbances continue to occur throughout Germany it is idle to look for a return of confidence in industrial undertakings. This feeling explains why what may be described as the better of the speculative articles remain quite neglected. Thus, for instance, *Spermaceti*, of which the price in New York is telegraphed at 4.30m., can scarcely be quoted as high as 3.45m. at our place. The same applies to refined *Camphor*, which is entirely neglected, and offers at 3.20m., although there is every prospect that the cheap sales of raw material, which will scarcely be placed on the market here until the autumn, may have a disturbing effect on the price.

ANTIMONY (CRUDE JAPAN).—Buyers have evinced more preference for this article, and large parcels offered for shipment have found purchasers at rising prices. To-day the article is scarcely obtainable under 88m. The 70 tons which are still in stock in our market are held firm at 95m. by first-hand owners, and if the requirements should necessitate it that price will have to be paid.

AGAR AGAR.—Inquired for at high prices.

BALSAMS.—*Copaiba*: another lot of 34 cases of Maracaibo is still offering. From Brazil new arrivals have also come in. *Peruvian* balsam: quiet and steady in price at 8·25m. for genuine quality. *Tolu*: unchanged at 3m.

CAMPHOR.—*Raw* camphor is still being offered at 125m. *Refined* flat and without business at 3.20m.

COCAINE.—Rather easier. The quotation is 400m., but a lower offer would probably not be refused.

COPPER (SULPHATE).—The present quiet condition of this article conforms with the general absence of business, and although the quotations here are considerably below those of English markets, both for immediate and June delivery, there is no business of any importance passing. It is said that the manufacturers have sold the whole of the production until July. Part of them refuse to enter into further contracts and others demand prices which are too high compared with the English competition. Second-hand dealers, however, are willing to enter into contracts for delivery, notwithstanding that it may be expected that as the summer approaches and a consumption sets in prices may begin to advance. To-day's spot quotation is 48m., June 46m., July to Sept. 44m. to 45½m.

HONEY.—The value of honey is declining, and the old stocks are being sold at lower prices. *Havana* and *Californian* honey may also be had at easier rates.

ROOTS.—*Rhatania Payta*: Depressed, owing to the large arrivals. First-class quality is obtainable at 65m. to 70m. *Sarsaparilla*: Owners have become more sanguine in consequence of the reports from New York, and all varieties must be paid dearer. Good *Vera Cruz* root cannot be obtained to-day under 80m. to 85m.

Election of Council.

SIR,—I fear that if I were to remain silent any longer, my motives might be misconstrued. I have hitherto abstained from issuing any address, in the hope that my speeches and votes in the Council-chamber during the last eleven years would have been sufficiently indicative of my policy in the past. I will venture, however, at the eleventh hour, to state my views on the more salient points of pharmaceutical politics which are now causing so much discussion in the columns of the pharmaceutical press.

1. As regards exemption from jury-service. I am decidedly in favour of this privilege being extended to every person on the register, and would do my utmost to obtain this concession, which is but justice to the trade.

2. I am in favour of a curriculum as set forth in the draft Pharmacy Bill, recently withdrawn, as being of the greatest advantage to the student, who would have to pass his Preliminary previous to his apprenticeship. Hundreds of young men fail in their examinations every year from this cause alone.

3. I am distinctly in favour, and have ever strenuously urged, in my place on the Council, a more rigorously enforced crusade against *all breaches* of the Pharmacy Acts.

4. No one has a greater objection to the stores than myself, and still more the bogus limited companies which are being floated in every direction; but I feel assured that they will not succeed, and patience will show that the intelligent pharmacist will win in the end. The extension of the poisons schedule has always been my contention in the past, and will be my policy in the future.

I gave a hearty support to the formulation of the new Pharmacy Bill, *for the present dropped*, by which we hoped to unite the whole trade in one compact body, by giving every chemist a true interest in the Society. Until this is done we cannot hope for any useful measure being passed to protect our interests. Let us first consolidate—we shall then be a great power for any future legislation.

Since I have had the honour of a seat on the Council, I have endeavoured to interpret the Pharmacy Acts in a broad and catholic spirit, and, if re-elected, shall in the future advocate liberal and conciliatory measures to the whole of the trade. JNO. GEO. FREDK. RICHARDSON.

Leicester.

SIR,—According to the "Statement of attendance of members of Council," published last week, it appeared that Mr. Gwilym Evans, of Llanelly, has been present at but six council meetings and nine committee meetings. The latter may possibly have been held on four days.

I wish to ask Mr. Evans if he considers this consistent with his promise to care in a special degree for "Trade Interests." JOHN HUMPHREY.

Sheffield, May 13.

Chinese Testimonials.

SIR,—There is no special connection that I am aware of between pharmacy and "tablet testimonials." The Chinese are a grateful people, and when particularly pleased with any services rendered, they like to make a note of it. These tablets are given to the leading distributors of a "famine fund," to an amiable consul, or to a captain for saving life at sea, &c. I believe Llewellyn & Co., Shanghai, were about the first recipients of this form of testimonial to foreign chemists, their pharmacy being adorned by four very elegant ones. I wonder Pears have not had one yet: side by side with the opinion of the "Lily," "Rose," and "Nightingale," H.E. Li Hung Chang's autograph would look well. These tablets do cost the donors something, which is more than can be said for many testimonials: unless rumour lies, the cost is sometimes on the other side.

SHANGHAI ROOSTER. (51/5.)

Pharmacy Act (Ireland) Amendment Bill, 1890.

SIR,—I have just seen a copy of this Bill, as read a first time and ordered by the House of Commons to be printed. I confess that I am amazed at the revolutionary changes which have been introduced into clauses 12 and 13.

I have been led to believe that the Bill placed on the table of the House of Commons was the Bill which you printed in June last as the result of a conference between representatives of the chemists and druggists and the Pharmaceutical Society. It is to that Bill that I have pledged my support, and I shall join in opposing any alterations.

The body of the Bill is practically the same; but clauses 12 and 13 have been entirely rewritten, so as to give the chemists and druggists a representation of nine out of twenty-one on the Council of the Pharmaceutical Society, instead of seven as agreed upon. This is a useless change, even in their own interest, because under the Bill as it stood it would be quite in the power of the chemists and druggists, owing to their overwhelming numbers, to have a large voice in the election of Council.

More than that, these clauses have been rewritten with such a total absence of intelligence and grasp of the situation, that they exclude the representatives of the chemists and druggists from any voice in the affairs of the Pharmaceutical Society until October, 1891! All the regulations, therefore, affecting the registration and examination of chemists and druggists (and all the side issues arising therefrom) would be settled without the assistance of a single chemist and druggist.

I must acquit the Dublin branch of the Chemists' and Druggists' Association of any share in this very unworthy breach of faith. On bringing it under the notice of my friend Mr. Boyd, he expressed his surprise and annoyance at it.

I trust that before you shall have gone to press my cause of complaint shall have been removed; but I must set myself right, as my name has been freely used, as you are aware, as a supporter of the Bill which members of the House of Commons have in their hands. Yours faithfully,

J. E. BRUNKER.

68 Grafton Street, Dublin, May 12.

SIR,—The noise which first hailed the prosecutions in Belfast seems to have somewhat subsided, and the energies which were at first expended in railing are now devoted to the less congenial occupation of explaining to members of Parliament that the purchase of a gill of laudanum on Christmas 1888 ought, consistently with the public safety, to entitle the man or woman who has sold an ounce of it out in pennyworths, not only to be registered as a chemist and druggist, but to entitle his or her apprentices to go up for examination on more favourable terms on account of this "deal" in poisons, and all this, notwithstanding the fact of being conscious of breaking the law. The victims are trying to "pile up the agony" of a five-pound penalty over the sale of a pennyworthy of poison; but they need not imagine that there is any ill-feeling on the part of the Pharmaceutical Society against any of them personally. When a Dutchman hunts a rat, when he finds it burrowing in a dyke, he has no animosity towards it; but he knows that if it be left to continue its operations, it may drown a province.

The Bill presently before Parliament is so very crude, and so utterly incompatible with the public safety, that the utmost stretch of political and personal good will can hardly countenance the letting loose on society, as qualified chemists and druggists, of the always highly respectable, but frequently excessively ignorant, traders who are hoping to enjoy the benefits of it. It is, of course, within the power of Parliament to legislate on any given subject, but it can hardly be expected that it will allow the Pharmaceutical Society to be forcibly ignored at the bidding of a conglomeration, or even combination, of the heterogeneous traders who are now squatting on its skirts. As the Bill stands, it is shorn of much that the late president admired in the antecedent negotiation. Where are now the three-guinea fines which were to go to found the institute that was to rival "Bloomsbury Square"? The difficulty of ascertaining who were in business in 1875 was called insuperable; but, all the same, they are differentiated from

the illegal traders with whom they have been cajoled, if not trepanned, into association. If the business of a druggist were hereditary, like a peerage, something might be advanced in favour of not requiring the heir-apparent to qualify himself for his position; but, as the law stands, certain qualifications are considered essential to the holders being entrusted by the Legislature with power to sell poisons, and the hereditary legislators appeared to be seriously impressed both with the necessity of that and of taking precautions against their witnesses going beyond their proper duties and outraging their solemn statements.

Yours respectfully,
A BELFAST CHEMIST. (51/29.)

Re Trade Interests.

SIR,—When Sir John Lubbock was making his effort to bring about a general earlier closing of shops, I called upon Mr. Bremridge and asked him if the Council intended doing what it could to support Sir John. I shall never forget the reply I received. Mr. Bremridge, ever the courteous gentleman, shook his head, and said, "No; we do not take up trade questions."

These, his *ipsissima verba*, astounded me; but, to make sure I had not misunderstood him, I again urged my point, only to bear the same words repeated by him.

May not this impolicy account for the undoubted unpopularity of the Society and the present agitation in favour of an infusion of fresh blood into the Council? In what other way can it be accounted for that less than one-third of the registered chemists support the Society? I believe the prevailing sentiment to be—"We shall not probably do worse, and we may do better."

During upwards of thirty years' experience of the business on my own account, having had many assistants, I think I am right in saying that only one of them has gone in for the Major, each one asking, when questioned about it, *Cui bono?*

Along with myself and employers generally they felt they had scant protection, and were represented or otherwise by a Society which was not in touch with the rank and file of the business, and not evincing even a desire to remedy the wrongs under which the business suffered.

It were surely gross insult to aver that 66 per cent. of the chemists of this country are mean, dissatisfied grumblers (without cause), with no *esprit de corps*, and without love for their profession.

Let a newly-constituted Council prove by deeds, not words, that it has the interests of the entire trade (and not a mere section of it) at heart, and we shall soon see that the Pharmaceutical Society will become as popular as it is now unpopular. It will not be expected that all the grievances of which we have to complain can be remedied at once, but what we want and expect our representatives to do is to agitate, agitate, agitate until our reasonable demands are conceded. I hail with much satisfaction a probable change in the constitution of the Council.

2 Malvern Road, Kilburn, May 6. I am, sir, yours truly,
W. M. BELL.

Sale of Poisonous Patent Medicines.

SIR,—I think "Reason," in his letter in your last issue, overlooks the fact that, if the Pharmaceutical Society really carry out their duties in compelling every sale of poisons (in whatever form it is made) to be conducted by a qualified man, the proprietor of a small business, who at present, as I do, can only afford an apprentice, or even an unqualified assistant, would soon be in a position to pay a qualified man even the higher salary which I really think he would be entitled to. The sale of poisons, pure and simple, is certainly not very remunerative, but the sale of preparations containing poisons is a very different matter, and embraces, according to my experience, a very large proportion of our business.

I, for one, shall certainly rejoin the Society if I see the slightest indication of their *bonâ-fide* intention of enforcing the present Pharmacy Act.

Yours faithfully,
PHARMACEUTICAL CHEMIST. (49/35.)

SIR,—I was pleased to read "Attraction's" letter in your last issue of THE CHEMIST AND DRUGGIST, and I agree with him in most of his opinions. It must be generally admitted that, after the important and clearly-reasoned decision of Mr. Justice Hawkins *re* the Pharmaceutical Society *v.* Wheeldon, we have entered on an entirely new era of pharmacy, and an opportunity is now offered to restrict the sale of many popular proprietaries to duly-qualified men. Such being the case, it behoves our governing body—who only, I believe, can take action in the matter—to be up and doing. A circular should be sent to all unqualified vendors pointing out their liability if the sale of various preparations (to be enumerated) is continued, and, if this should prove useless, prosecutions should be instituted.

Yours truly,
RHEI. (49/3.)

Pharmaceutical Society *v.* Wheeldon.

SIR,—I think, with Mr. Schacht, that the Council of the Pharmaceutical Society made a great mistake when they decided to prosecute in the case of Mr. Wheeldon. They have, as a result of this action, placed chemists throughout the country in a most awkward and embarrassing position; for, although the ruling of Mr. Justice Hawkins may be according to the strict letter of the Pharmacy Act, it certainly is not either its spirit or intention. This is, I think, abundantly proved by the fact of 20 years being allowed to elapse before it has even been suspected that the Act contained any clause that would be so interpreted. I am not alone in the opinion that it will be absolutely impossible to carry out the law, as now laid down, in small pharmacies and in country districts where a qualified assistant cannot be afforded.

I hope the electors will show their sense of this latest action of the Council by placing Mr. Schacht at the head of the poll, and electing all the new candidates, sending the others to the rear as an expression of

Manchester, May 13. INDIGNATION. (50/31.)

SIR,—The Pharmaceutical Society, by its action *v.* Wheeldon, has produced a state of things intolerable and unjust to the smaller chemists who keep possibly only an unqualified assistant or an apprentice. To them it means perfect slavery. They cannot leave their premises without the fear of being prosecuted as law-breakers. Now, bearing in mind the case of those who were in business before the Pharmacy Act of 1868, and that a very modified examination was considered sufficient protection to the public, how is it that a much higher qualification is discovered to be necessary before an assistant or apprentice can be trusted to serve, say, a pennyworth of toothache-tincture during the temporary absence of the proprietor of the business, presuming it contains a few drops of laudanum?

An "unqualified" assistant and an apprentice who has had not less than two years of instruction should be perfectly competent to serve poisons if the proprietor has satisfied himself of their trustworthiness, always remembering that the owner of the business is civilly responsible to the public in the event of carelessness.

It must not be supposed that I am retrogressive—I am for progressive pharmacy; but I quite agree with Mr. Schacht, and admire the manly way in which he has discountenanced the recent action of the Society.

There is another serious view to be taken of the Wheeldon appeal case; it creates a trade monopoly in favour of chemists who can afford to keep qualified assistants against their lesser competitors by forcing the public to go to the former for anything wanted quickly during a temporary absence of the latter if it comes under the poison schedule. This is simply taking the bread from the smaller chemists in these times of severe and unfair competition in the trade. Yet the leading article of the *Pharmaceutical Journal* of May 3 coolly speaks of the Wheeldon decision as "entailing upon some persons a certain amount of inconvenience."

The Pharmaceutical Society should ask itself why it is supported by so small a proportion of the trade, and endeavour to discover the cause, by personal communication with every member of the trade through its local secretaries instead of bitterly complaining in print. Failing this,

the chemists of this country should unite in a trade guild, and show to the Legislature a united front. They would then get a fair hearing, as others have done, and are doing, of any just grievances. I am, sir, yours faithfully,

May 13, 1890. PHARMACEUTICAL CHEMIST. (49/74.)

SIR,—Now that the case of "The Society *v.* Wheeldon" has ended, we may endeavour to learn what advantage anyone, except the lawyers, has gained. Chemists have one more restriction added to a trade already nearly harassed out of existence. The matter is likely to prove a sorry joke to some 75 per cent. of the chemists in this country, who now have the doubtful satisfaction of knowing that if their apprentice, or junior, or unregistered senior assistant sells 1*d.* worth of oxalic acid to clean brasses, or 1*d.* worth of laudanum to ease toothache, the said seller is guilty of an illegal act, and may be fined and disgraced accordingly; whilst for every chemist's shop there are three doctors' "surgeries," where the wife, sister, daughter, coachman, or even tiger in buttons, compounds (and probably confounds) the doctor's "prescriptions." Only a few weeks ago a doctor killed three children by an overdose of "soothing" powders, yet the coroner passed this without comment. Had a chemist blundered in this manner, the whole of "coronerdom" would have vented its ire on the world of chemists at large. Compare this with the simple transgression of Wheeldon, and—"puzzle": find the justice. Surely now 'tis the last straw on the camel's back, and the Society will float a new Bill to put the whole question and trade on a fair and just footing, and draft the provisions of the Bill so that the opposition which defeated the last Bills may be conciliated and won over, by showing that they intend to live and let live, and to interfere with no man who has established *bonâ-fide* interests. How much wiser to do this than, by grasping for too much, lose all again!

Yours sincerely,

J. L. (49/16.)

A correspondent signing himself "A. Q C." sends us a letter on this subject, but he disqualifies himself by starting with the oft-repeated fallacy that the Pharmacy Act lays it down "that the person on whose behalf the sale is made shall be deemed to be the seller." We are tired of explaining that this definition of the seller is expressly stated to apply to the 17th section only, thus furnishing strong ground for presuming that that meaning was not intended to apply to the rest of the Act. Later on this correspondent alludes to calomel, colocynth, "unction," &c., as poisons, which they are not. We cannot give space for essays so fundamentally inaccurate as this one.

47/18. *Nemo* sends us a letter criticising the "weak, contradictory argument" of Mr. Justice Hawkins; but the sections of the argument which he sets himself to refute are not accurately quoted.

DISPENSING NOTES.

The opinions of practical readers are invited on subjects discussed under this heading.

Ambiguous Direction.

Hyd. c. cret.	gr. ss.
Sod. bicarb.	gr. j.
Pulv. cret. arom.	gr. ij.

M. Ft. pulv. 2.

SIR,—What is meant? Is the above to be mixed and divided into two powders, or is it to make one powder and two to be sent? Opposite opinions have been expressed by experienced dispensers. W. (44/19.)

A Hair Lotion.

In reply to "Silurian" (40/24), I have frequently dispensed the same lotion, but, like himself, have always found it separate into two layers. My mode of procedure is to mix the glycerine, borax, and oils together, and afterwards the spirits. A. H. (45/53.)

An Emulsion.

SIR,—How should the following prescription be dispensed?—

Tr. opii	♏80
Syr. chloral	ʒj.
Tr. tolutanæ	ʒiij.
Tr. scil'æ	ʒiij.
Ac. sulph. dil.	ʒij.
Aquæ ad..	℥viij.

M. Ft.

Sig.: To be taken as directed.

FACTA-NON-VERBA. (43/58.)

45/69. *T. M.*—**Excipient for Ext. Cascaræ Sagradæ.**—Liquorice and tragacanth. Varnish.—"The Art of Dispensing," page 55.

46/20. *J. H. Morris.*—**Excipient for Salol.**—Three grains glycerine of tragacanth.

LEGAL QUERIES.

48/40. *Querist.*—The law laid down by Mr. Justice Hawkins applies to poisons in both parts of the schedule.

49/21. A says he sold a business to B, informing B both verbally and by letter that among the stock were syphons and cases on loan. B refuses to give up these empties to the carriers for return, and the firm who lent the syphons are pressing A for the value of them or their return. What is his way out of the difficulty? [If B sticks to his refusal the only way is to sue him for the value of the syphons, &c. Then it will be a question for the Court to decide whether the fact that these were not included in the stock sold was made clear to B.]

42/24. *Perplexed.*—The internal medicines are certainly liable to medicine-stamp duty if the labels you send are used. There may be a little doubt about the embrocation label, but we should expect it would render the article liable.

49/37. *Linimentum* asks: If A, a chemist, prepare a liniment (composed chiefly of methylated spirit) for B, a quack doctor, the amount of spirit used being between thirty and forty gallons per three months, is he in any way liable to be fined, or must he enter into a bond with the gentlemen at Somerset House? [The chemist and the quack are each liable to a penalty of 100*l.* Before making or selling the preparation they must get express permission from the Board of Inland Revenue.]

50/10. *Dexter.*—Associates of the Society are not eligible for election on the Council. Chemists and druggists not connected with the Society are, of course, ineligible.

50/8. *Leo.*—We cannot undertake to indicate where the line is to be drawn which renders it necessary to label a medicine "Poison." We should not ourselves label a 4-oz. mixture "Poison" because it contained 2 drachms of paregoric or spirit of chloroform. (The latter is not a "poison.")

50/41. *Washer.*—You can obtain the specification of the patent for a few pence from the Sale of Patents Office, Cursitor Street, Chancery Lane, but you must describe it by its year and number, or by the name of the patentees and the year.

45/14. *Rheum.*—Probate in England must be taken at the office of the district within which the deceased was last domiciled or at Somerset House, London. The probate districts are not quite coincident with the counties. The highest rate of probate duty is now 4 per cent.

50/38. *B. A.*—Wholesale dealings in poisons by unqualified men are legal. Compounding poisons by unqualified persons is not necessarily illegal. What is prohibited is to keep an open shop for doing it. Surely a person who buys vermin-killer from a chemist may compound it with some bread-and-butter?

The Sale of Unstamped Proprietary Articles.

An inquiry having been addressed to the Inland Revenue Department asking if the supply of fl. ℥ij. Fellows' syrup to another chemist unstamped met with its approval has elicited a reply: "That the Board is not prepared to extend the concession under which, for dispensing purposes, preparations liable to medicine-stamp duty are allowed to be supplied unstamped either in the manner suggested (*i.e.*, as a small wholesale order) or in any other direction. The conditions set forth in the 'dispensing' labels must be strictly complied with, and if the preparation be sold unmixed a penalty will be incurred."

It will thus be seen that, however willing a chemist may be to oblige his neighbours, only original bottles can be sold.

VERAX. (48/74.)

Pharmacy in the Isle of Man.—Several correspondents send us cuttings of a letter from the *Yorkshire Post*, in which the writer states that the Pharmacy Act does not extend to the Isle of Man. The statement is questioned, but it is correct, although there may be local regulations. The Pharmaceutical Society has a Preliminary examination centre at Douglas, but this is entirely for the convenience of apprentices. The Society has no jurisdiction in the island.

50/32. *H. J. J.*—There are two "sticky fly-paper" patents—one by Mr. S. Wilson, of St. Helens (No. 10,781, 1887), in which the use of parchment-paper is claimed; the other by Messrs. Tunbridge & Wright, Reading (10,767, 1889), whereby a method of folding is monopolised. We should think your fly-paper infringes both patents, but advise you to get from the Sale of Patents Office, Cursitor Street, E.C., the specifications named above.

51/42. *A. B. C.*—The question whether the medicines you name are covered by the term "patent medicines" in the 16th section of the Pharmacy Act has not been before any court. It depends upon the point whether unqualified assistants can legally sell them.

51/15. *Colocynth.*—An unqualified person may not "take, use, or exhibit" the title of chemist. The display of a title such as "A (late Z, chemist)" is illegal. But "A (Limited), late Z, chemist," is not illegal, because limited companies are not affected by the clause.

50/74. *Delta.* — A compound containing oxalic acid and Prussian blue for laundry purposes might be regarded as a "poison" legally. The Act prohibits the sale of oxalic acid by other than qualified persons. How far this applies to all compounds into which oxalic acid enters has never been cleared up. Prussian blue is not a poison.

MISCELLANEOUS INQUIRIES.

Correspondents who have made inquiries regarding the following subjects will find the information in the numbers indicated.

41/37. *Peptone.*—**Essence of Rennet.**—August 11, 1888, page 191; September 22, 1888, page 388; and May 18, 1889, page 712.

44/1. *Dens.*—**The Dental Curriculum.**—For full information consult our last educational number, September 21, 1889.

50/11. *Wilts.*—**Isinglass Cement Formulæ.**—March 30, 1889, page 467, and August 25, 1888, page 259. The latter is the better formula.

45/36. *Analyst.*—**Qualifying as Analytical Chemist.**—See our last educational number.

41/44. *E. H. Martlew.*—**Glycerine Suppositories** (with gelatine):—Gelatine 1 part, water 2 parts, glycerine 4 parts (by measure). Soak the gelatine in the water, add the glycerine, and heat on a water-bath until the product weighs 6 parts, which may be divided into 15-grain or larger suppositories.

42/10. *Chemist.*—The **Brown Hair-dye** may be made by dissolving 10 grains of nitrate of silver and 1 or 2 grains of sulphate of copper in 1 oz. of distilled water, and adding strong solution of ammonia until the precipitate at first formed re-dissolves and the solution becomes clear, then make up to 2 oz. with distilled water. The hair should be perfectly free from grease when the dye is applied, and for immediate production of the colour the use of a weak solution of sulphydrate of ammonium is necessary.

43/46. *Pix.*—Lunge's work on coal-tar is considered to be one of the best. The use of spermaceti has not, as far as we are aware, been authorised for the manufacture of explosives. The recent rise in price is supposed to be due to scarcity.

43/38. *Glycerine.*—In our issue of July, 1885, you will find a large number of formulæ for perfumes, containing amongst them those that you require; and in February, 1886, similar formulæ were given for sachets. Please consult these issues. **Essence of Ginger Ale** containing the ingredients which you mention should be of the following proportions:—

Soluble essence of ginger	20 oz.
Capsicine	15 minims
Oil of orange-peel	30 „
Essence of pear	15 „

44/45. *J. Gibson.*—We fail to appreciate your suggestion that an examination of the quack's medicines would be of general or practical interest to readers of this journal. The tumour to which you refer was a "slough" created by the escharotic.

44/30. *Nemo.*—Board of Health **Cholera or Diarrhœa Mixture**:—

Aromatic powder (pulv. cret. aromat.)	3 drachms
Spt. of sal volatile	3 „
Tincture of catechu	10 „
Compound tincture of cardamoms ..	6 „
Tincture of opium	1 „
Chalk mixture, to make	20 oz.

Dose for adults, 1 oz., and proportionately less for children.

44/35. *Seidlitz.*—(1) Commercial sulphate of iron can be purified for photographic purposes by simple recrystallisation. (2) To make half a sovereign into a solution of chloride of gold, 1 grain to the drachm, proceed as follows:—Reduce the coin to filings, and boiling in ½ oz. of Aqua Regia (occasionally replacing what is lost by evaporation) until dissolved. Then evaporate to dryness, wash with ½ oz. of rectified spirit, dry, and dissolve in 10½ oz. of distilled water.

45/65. *Nemo.*—**Lecture on Food and Drink.**—See the results of the Postcard Competition recently reported in our columns, and read Johnson's "Chemistry of Common Life," and Winter Blyth's "Foods," &c.

45/51. *Liminentum.*—(1) Have you tried the formula given on page 615 last week? (2) **To Blacken Ivory.**—Wash well with solution of soda and water; then dip in a solution of silver nitrate, and lastly in solution of ammonium sulphydrate.

45/43. *W. J. P.*—Please say the nature of the substance for which you wish the cement.

45/39. *Erica.*—An advertised method for **Exterminating Moles** consists of mixing 1 oz. of powdered nux vomica with 1 pint of worms, allowing to stand for twenty-four hours, then letting a few of the worms wriggle into the haunts of the moles.

45/17. *J. H. Collins.*—We have never heard of copying-presses made from tragacanth. You will find a formula for the gelatine **Graph** on page 313.

46/42. *W. B.*—**Camphor-Chloral** is made by rubbing together equal weights of camphor and chloral.

46/52. *A. S. Parker.*—**Dusart's Preparations of Lactophosphates** are made by a Paris firm, and the process by which they are made has not, to our knowledge, been published. We take the statement on the circular which you send to be a piece of tall writing. There is a formula for **Syrup of Lactophosphate of Lime** in the United States Pharmacopœia, and other formulæ in the National Formulary. The following is the Codex formula:—

Biphosphate of lime	12·5
Syrupy lactic acid, s.g. 1·21	14 (by measure)
Distilled water	340
Distilled water	630
Tincture of lemon	10

M. s. a.

The tincture of lemon is made by macerating 1 part of the fresh peel in 2 parts of alcohol.

46/9. *Hardy.*—The information was given in our issue of May 3.

46/10. *Inquirer* (Weymouth)—Williams's "Chemical Science."—See Reviews, October 23, 1889, page 598.

9/90. *H. F.*—(1) The sample which you send us is what is known as **Brewers' Saccharine**, and consists principally of glucose. (2) If the chlorodyne to which you refer can properly be ranked as a poison, and is not a patented medicine, it can only be sold by qualified chemists.

F. B. (49/1), who writes from the "Royal College of Physicians, London, S.W.," has missed an important part of his communication—his name.

44/56. *Insect* wishes to make the following ingredients into a cake like soap. We presume that it is a **Moth Cake** he is aiming at:—

Cedar dust
Camphor
Cassia powder
Orris powder
Essential oil, a little.

The quantities are not given. Assuming 1 oz. of each to be used, add ¼ oz. of gum myrrh, recently powdered, and the same weight of powdered curd soap, and sufficient proof spirit to mass.

46/31. *C. H. P.*—(1) **Granular Preparations.**—Manufacturers of these follow their own methods, and are careful to keep them secret. The best form of pan is oblong and comparatively shallow—say, 4 inches deep—and should be heated by steam. In this the ingredients are heated until they form a paste, which is then passed through a sieve with large meshes. The way this is done can only be learnt by practice. The granules should not be received on the paper in a heap, but in an even layer, so that they may not be disturbed in the drying. (2) We have frequently stated that the best way to make **Essence of Lemon** for aërated waters is to shake up the oil with less rectified spirit than will dissolve it—say, 1 oz. of oil to 5 oz. of spirit—allow to stand until clear, then draw off the spirituous portion. This has a fine aroma, such as cannot be obtained by the use of alkalies. Another good plan is given in the following formula:—

Oil of lemon	2 oz.
Rectified spirit	18 „
Water..	2 „
Chloride of calcium, dried	65 grains
Phosphate of sodium, in crystals ..	210 „

Mix the oil with the spirit, and add to it the chloride of calcium dissolved in ½ oz. of water. Shake well; then add the phosphate of soda dissolved in the remainder of the water. Mix, and set aside for two days, shaking occasionally; then filter.

46/53. *J. S.*—**Hair-restorer.**—The sample which you send appears to be made with sublimed sulphur—otherwise it does not differ from the ordinary kind. You can make a similar wash by the following formula:—

Sublimed sulphur	60 grains
Acetate of lead	45 „
Bicarbonate of soda	2 „
Glycerine	4 drachms
Rose-water	3 oz.
Water, to	10 „

Rub the powders together in a mortar along with the glycerine until all trace of the crystalline appearance of the sulphur has disappeared; then add the rose-water, and, lastly, the plain water.

46/2. *G. M.*—(1) We are not aware that the physiological action of phosphites has been studied. (2) The oxidation of hypophosphites on exposure to the air cannot be prevented. Glycerine retards it to some extent.

48/24. *H. T.*—**Fellow of the Chemical Society.**—A form has to be obtained from the Secretaries, Burlington House, W. In this the qualifications of the candidate have to be stated, and attested by five fellows, three of whom must sign from personal knowledge. After that the application must be agreed to by the council of the society before a ballot is taken for election at an ordinary meeting of the members. There is a feeling amongst many of the members that the fellowship is getting too cheap, and it is expected that henceforth it will be more difficult to get into the society.

47/69. *H. R.*—We have published a formula for **Reliable Marking-ink** many times. See our issue of June 30, 1888, page 854.

Information Wanted.

[*Replies to the following requests are solicited by correspondents of* THE CHEMIST AND DRUGGIST.]

39/38. Can anyone suggest a good method for preserving green peas?

45/52. What flavouring is used to impart the odour to cake cavendish?

45/39. *Erica* has tried the time-honoured formula for **Essence of Patchouli**, viz.:—

Rectified spirit	1 gallon
Oil of patchouli	10 drachms
Otto of rose	2 „

He does not find it answer. He does not say in what respect it fails, but he has used the best oils, and we presume that it is too weak. Is there a better formula; and what is the general experience?

45/30. Formula for a quick-drying basket-varnish.

46/61. Stock homœopathic labels: where obtainable.

47/74. *Kimia* wishes to know what are the chemicals used for saturating the cotton cord and the liquid in the tube of the chemical cigar-lighters sold by tobacconists.

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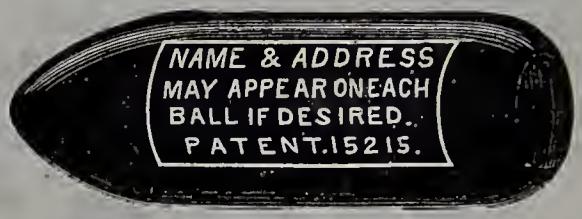

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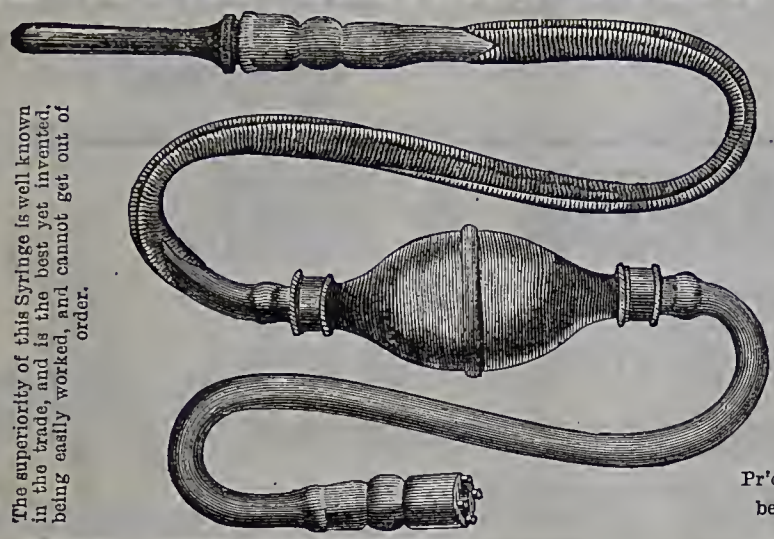

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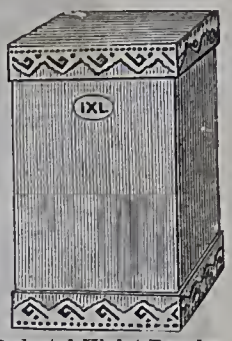
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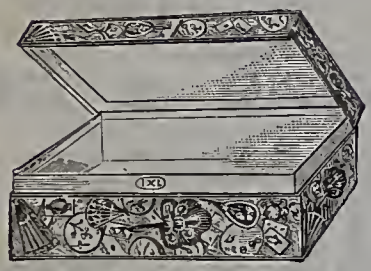
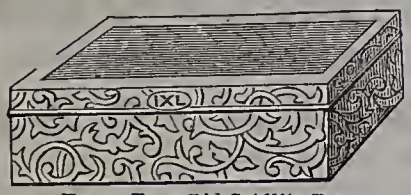

Oriental Lozenge Box.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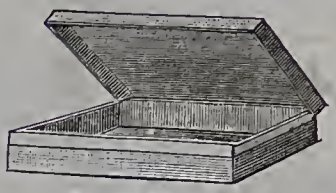
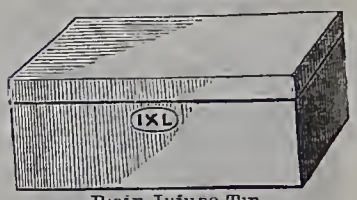
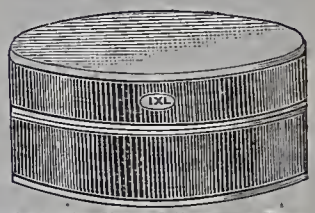
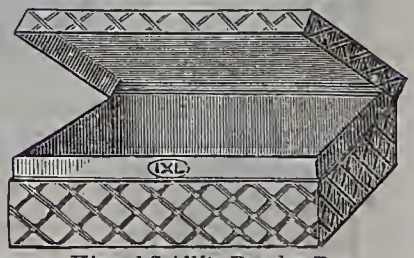
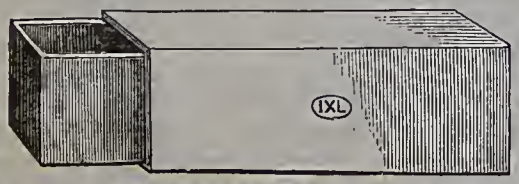
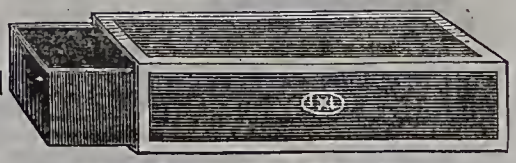

Potash-Pellet Box.


Plain Jujube Tin.

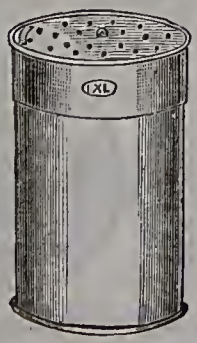

Oval Cardboard Lozenge Box.

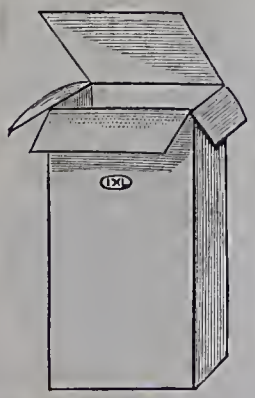

Hinged Seidlitz-Powder Box.


Plain Powder Slide.


Bronze Powder Slide, White Edges.

Cosmetic Case.


Insect-Powder Tin.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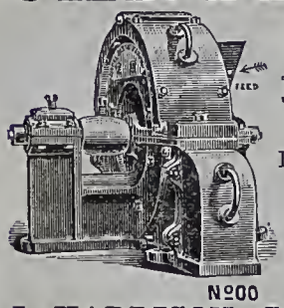

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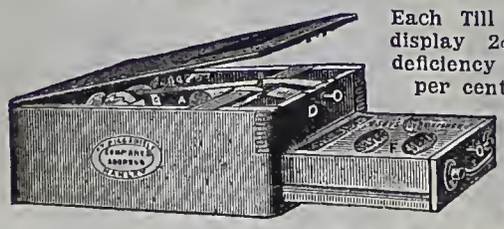

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At the Paris Exhibition, 1889, for

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See Advt. pp. 374 to 377 in "C. & D. Diary," 1890.

PHILADELPHIA, 1876.

PRIZE MEDALS. INTERNATIONAL EXHIBITIONS.

MELBOURNE, 1880.

SYDNEY, 1879.

KILNER BROTHERS

GLASS BOTTLE MANUFACTURERS.

No. 3A GREAT NORTHERN GOODS STATION, KING'S CROSS, LONDON.

PARIS, 1878.

Telegraphic Address: "BOTTLES LONDON."

LONDON, 1862.

Telephone No. 7509.

PARIS, 1875.

EXCELLENT QUALITY.

EXTENSIVE VARIETY.

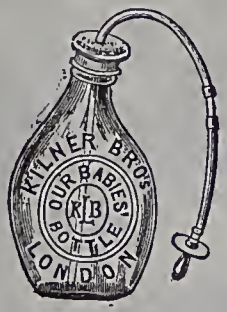
PRICES LOW,

Dispensing.

FIRST ORDER OF MERIT, MELBOURNE, 1888.

Dispensing.

QUOTATIONS AND SAMPLES SENT ON APPLICATION,



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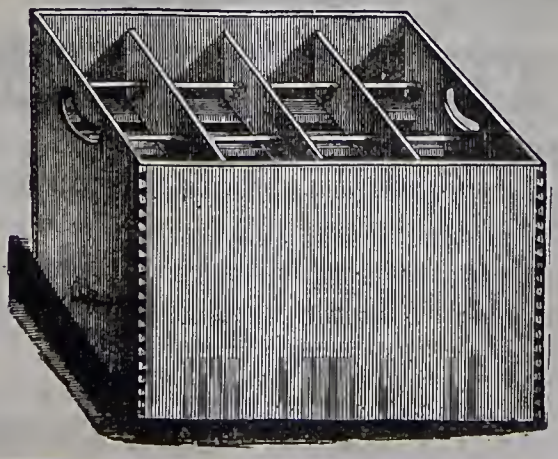
FEEDING, PICKLE, DRUG, OIL, SAUCE, VINEGAR **BOTTLES.**

WINE, SPIRIT, BEER, CONFECTIONERY **BOTTLES.**

Mineral Water BOTTLES.

VAN BOXES.



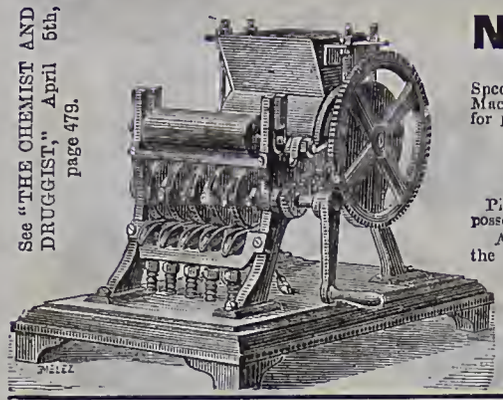
CASES.

Mineral Water BOTTLES.

MAKERS OF ALL KINDS OF

MACHINERY for the MANUFACTURE of PHARMACEUTICAL PREPARATIONS

See "THE CHEMIST AND DRUGGIST," April 5th, page 479.



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Special Mills for Laboratories, Mortar-mills, Sifting-machines, and Grinding-machines. Pill-making Machines, Silvering-machines, Coating-machines, Pill-printing Machines. Sugar-coating Pans. Machines for preparing and for cutting Pill-masses. Machines for manufacturing Lozenges. Machines for making Pearls and Gelatinous Capsules. Laboratory Presses, Mixing-machines, &c.

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Pill-printing has long been considered a luxury, and remained in the hands of a Paris house, which alone possessed a proper coating process.

As a matter of fact, the coating was the unique difficulty to the extension of the process. This no longer is the case, and we are in a position to offer our clients communication of a means of coating pills. This coating serves as a protection to the substances composing the pills; also, it is absolutely soluble in the gastric juices, and a clear impression is obtained by printing.

The coating effectually protects the pills from alteration from whatever cause, in any climate or temperature. It is less costly than silver or sugar coating.

Thus, by our means, pill and granule printing has become quite practicable. It gives a superior appearance to the goods, besides which the printed inscription has the advantage of advertising the manufacturer's name, or of indicating the nature of the active principle.

GARDNER'S
PATENT COMBINED
'RAPID' SIFTER & MIXER,

Reduces lumpy powders, sifts and mixes faster, and makes a more perfect blend than any Machine in the Market.

Send for full particulars to

WM. GARDNER,
ENGINEER, &c.,
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FOR HAND OR POWER. Capacities, from 15 to 300 lbs. at one mixing.

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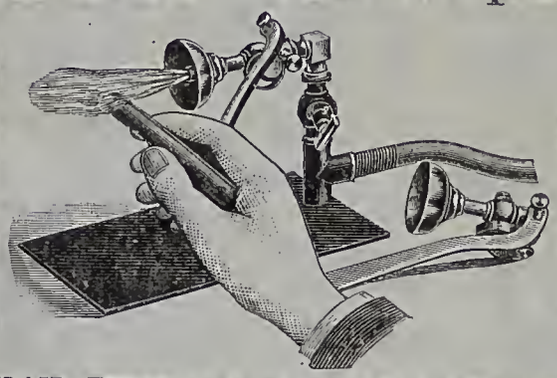
SELF-ACTING SEALING JET

Adopted by The Apothecaries' Hall, and leading Chemists, Stationers, and Tobacconists. Great saving in Gas and Labour.



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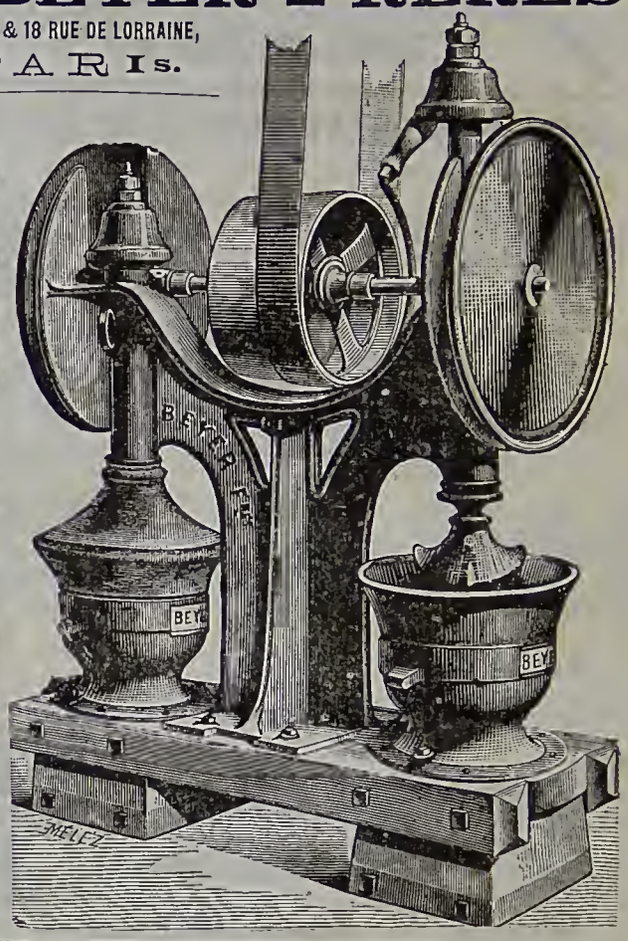
BEYER FRÈRES
16 & 18 RUE DE LORRAINE,
PARIS.

MORTAR MILL, with two or more Trepans.

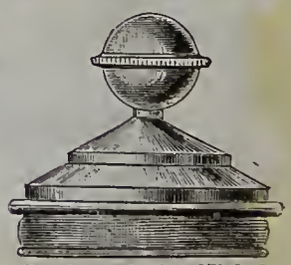


NEW PATENT
AIR-TIGHT CHEMIST JAR.

A slight turn of the knob presses the indiarubber Band against the glass, and renders the vessel absolutely air-tight. The Stopper is made of pure Nickel, of handsome shape.

INVALUABLE FOR SHOW BOTTLES, CHEMISTS, CONFECTIONERS, &c.

Samples and Prices of all Chemists' Sundriesmen.



Section of the Nickel Stopper when closed.

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37 CRUTCHED FRIARS, MARK LANE, E.C.

WILLIAM TOOGOOD'S

WAREHOUSE AND SHOW ROOM,

BURLINGTON BUILDINGS,

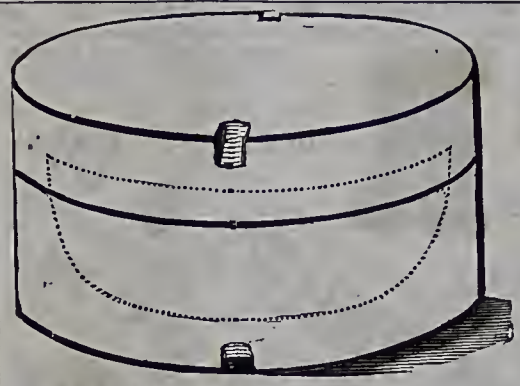
HEDDON STREET, REGENT STREET, LONDON, W.

TOOGOOD'S

IMPROVED PATENT

EARTHENWARE COVERED POTS

Are claimed to be the most perfect and convenient yet offered to the Trade.



Owing to the increasing demand for our Patent Pots, we have introduced a Special THIN Series for Dispensing.

These Pots are beautifully glazed and finished, and, being very light, are specially adapted for sending by post.

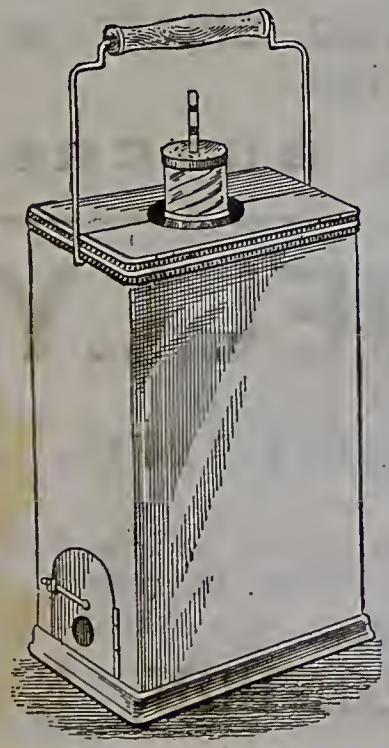
	1 dr.	2 dr.	½	¾	1	1½	2	3	4	6	8 ounces.
ORDINARY THICKNESS—	1/6	1/6	1/6	1/8	1/10	2/	2/3	2/10	3/6	4/6	5/6 per doz.
THIN FOR DISPENSING—	½	¾	1	1½	2	3	4	6	8 ounces.		
	1/7	1/9	2/	2/2	2/5	3/	4/	5/	6/ per doz.		

THE LACTOTHERME

(REGISTERED TRADE MARK) OR

INFANTS' PORTABLE MILK STOVE,

Patented in England and Abroad.



ADVANTAGES.

The Lactotherme heats milk exactly to the proper temperature at which it should be given to Infants, viz., 98 degrees Fahrenheit, this being the temperature of the milk from the mother's breast.

The Lactotherme does not cause the milk to turn sour.

The Lactotherme greatly benefits the health of Infants, as by giving food at a proper temperature, Colic, Diarrhœa, and Convulsions are guarded against.

The Lactotherme is portable, and may be as effectively used in a Railway Carriage as in the Nursery.

The Lactotherme will be also found a boon to Invalids for keeping warm Beef Tea, &c., during the night.

The Lactotherme is safe, cleanly, and effective, and burns without smell.

WHOLESALE PRICES.

No. 1. Japanned Iron, 6/- each. No. 2. Polished Brass, 8/6 each.
No. 3. Nickel Plated, 10/- each.

Each Apparatus is furnished complete with Thermometer, Box of Prepared Carbon, Box of Wicks, and Float.

TOOGOOD'S PATENT BRONCHITIS AIR KETTLE,

51/- per dozen.

SOLE AGENT FOR DR. LEE'S STEAM DRAFT INHALERS.

PLEASE NOTE.

We guarantee our **S.V.R.** to stand the Nitrate of Silver and the Ammonia tests, and to be entirely free from the offensive odour which usually characterises low-price spirits.

Pure Grain Spirit B.P., 56 o.p., 19/3 per gallon.
" " Double Distilled, " 19/7 "
CASH WITH ORDER.

S.V.R.

SPECIALITY FOR PERFUMERY.

This pure grain spirit, which has been thrice rectified and filtered through charcoal, is being largely used in making high-class Perfumes.

Price, 19/10, 56 o.p.; 20/4, 60 o.p. Cash with order.
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STEPHEN SMITH & CO., BOW, LONDON, E.

SPECIAL QUOTATIONS FOR QUANTITY.

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LONDON, E.C.

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TREBLY DISTILLED BY OURSELVES.
PERFECTLY PURE.
FIT FOR ANY PURPOSE.

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S 0/64 V 2/3 M

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JONES & COMPANY,
COPPERFIELD ROAD
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LARGEST MAKERS IN THE KINGDOM.

We are prepared to supply METHYLATED SPIRIT in 5-gallon quantities at Lowest Prices.

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SAMPLES FREE.

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FOR MEDICAL AND PHARMACEUTICAL PURPOSES.

White, Yellow, Veterinary, and Waterproof. All kinds put up in 1-lb., 5-lb., 7-lb., 14-lb., 28-lb., and 56-lb. Patent Tins, and in 300-lb. Barrels.

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The long established superiority of **"Tea Rose," "Royal Daylight," "White Rose,"** and **"Westminster"** American Petroleum Oils, manufactured by the Standard Oil Company of the United States, is well known to the Trade and to Consumers, and no Oils are so widely and justly celebrated. Their superior burning qualities, freedom from odour and from any tendency to smoke, and their general excellence, have placed them above comparison with any and all other brands.

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BEESWAX.

W. H. B. PURE REFINED.

In 2-lb. cakes, in cases of about 130 lbs.
" 1 " " " 130 "
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" oz. cakes in 2-lb. parcels in cases of 54 lbs.

W. H. B. PURE WHITE.

In round cakes in 2-lb. parcels, or in oblong cakes, loose } in cases of 54 lbs
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Plain blocks of 7½ lbs. in cases of 250 lbs.

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Plain round cakes in 2-lb. parcels in cases of 72 lbs.

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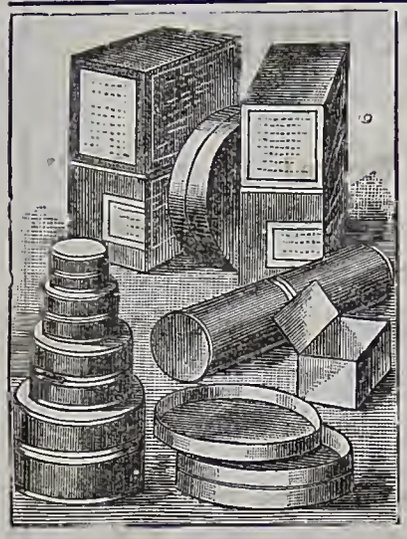

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Sheep Dip or Fluid Disinfectant in 40-gallon casks at special rates.
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ON SWANSDOWN, 16 IN. WIDE.
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Vinolia, small, stamped	15/6	per doz.
" " unstamped	12/8½	"
" medium, stamped	30/10	"
" " unstamped	25/3¼	"
" large, stamped	53/4	"
" " unstamped	42/3	"
" Powder, small	14/9¾	"
" " medium	29/7½	"
" " large	50/7¾	"
" Soap (Otto of Rose Toilet)	21/1¼	"
" " (Balsamic Medical)...	16/11½	"
" " Shaving (small) ...	16/11½	"
" " " (large) ...	29/5½	"

Chemists will please note that after June 1 the Retail Price of our Vinolia Shaving Soap will be reduced to 1/6 and 2/6 per Stick.

RETAIL PRICES:—VINOLIA, 1/9, 3/6, and 6/- per box.
VINOLIA SOAP (Balsamic Medical), 2/-, (Otto of Rose Toilet) 2/6 per box of 3 Tablets.
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